

DOCUMENT RESUME

ED 195 069

EC 130 846

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TITLE Arts in Education for Handicapped Children. Final Report.
INSTITUTION National Committee, Arts for the Handicapped, Washington, D.C.
SPONS AGENCY. Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C. Div. of Innovation and Development.
BUREAU NO 451AH60993
PUB DATE Dec 79
GPANT G00760347A1
NOTE 337p.: Parts are marginal and may not reproduce well in hard copy.

EDRS PRICE MF01/PC14 Plus Postage.
DESCRIPTORS *Academic Achievement: *Aesthetic Education: *Basic Skills: *Child Development: *Disabilities: Elementary Education: *Fine Arts: Fused Curriculum: Program Descriptions: Teaching Methods
IDENTIFIERS *Arts in Education Project

ABSTRACT

The document presents the final report of the Arts in Education Project, a research project of the National Committee, Arts for the Handicapped to develop and measure the effects of an arts infused curriculum on the academic performance of handicapped elementary school children. A model for infusing the arts into the established curriculum was created, along with a guide to provide educators with arts strategies for teaching basic learning skills and promoting aesthetic development. The arts infused curriculum model utilizes all the arts (visual arts, drama/theater, dance/movement, and music) in an interrelated way to teach basic learning skills (gross motor development, sensory motor integration, perceptual motor integration, language development, conceptual skills development, and social skills development) and aesthetic development (awareness, imitation, self initiation, skill development, and critical judgment). In the 3 years of the project, a large volume of data has been accumulated, with test results suggesting the success of the program. The final report covers project rationale, goals and objectives, organization, activities and accomplishments, research and evaluation results, and conclusions and recommendations. Sample instruments and forms, research and evaluation data, and publications are appended. (DLS)

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Final Report

Project #451A H60993
Grant #G00760347A1

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ARTS IN EDUCATION FOR HANDICAPPED CHILDREN

December 1979

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

Office of Education

Bureau of Education for the Handicapped

Division of Innovation and Development

AUG 25 1980

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ABSTRACT

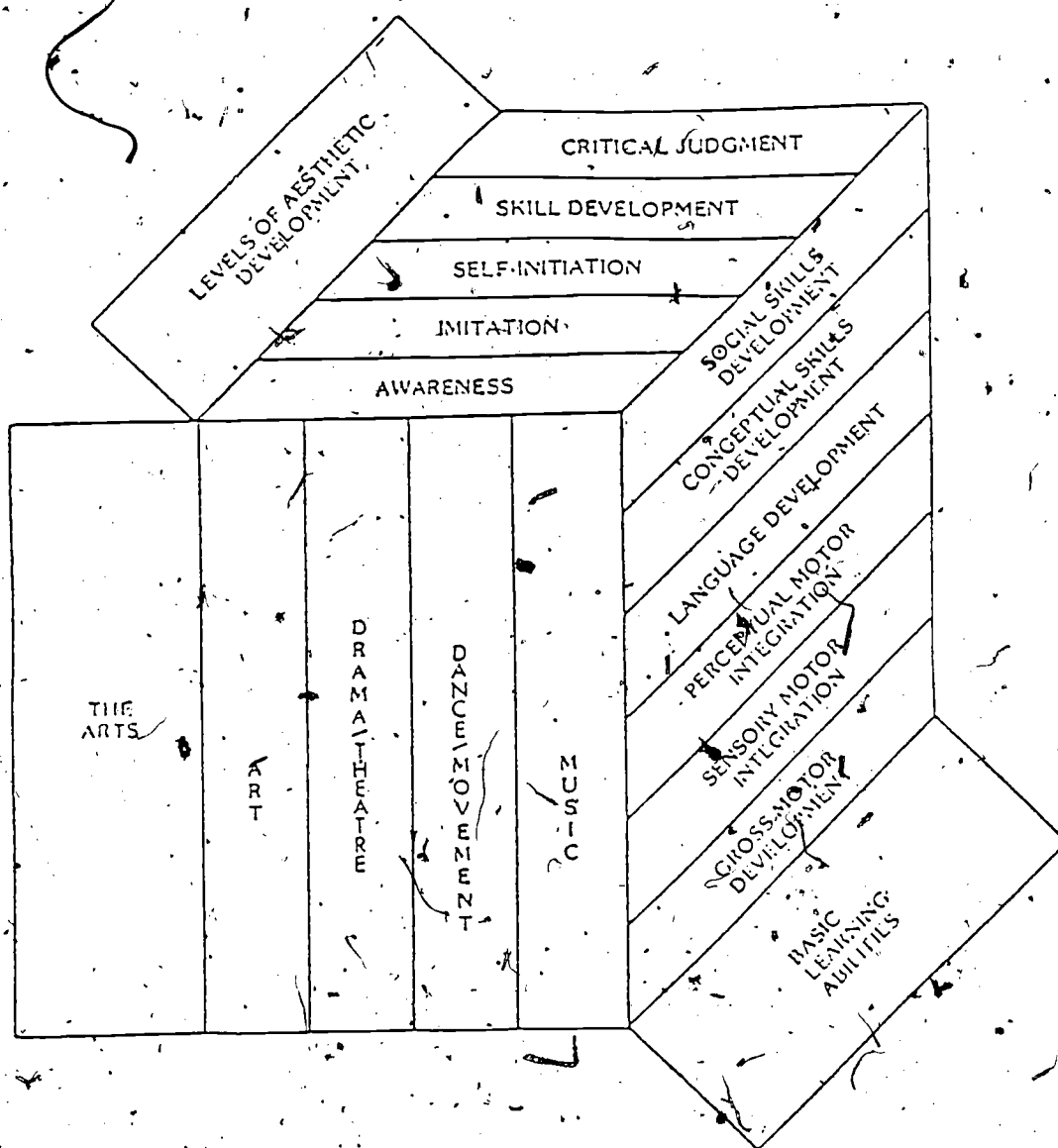
The National Committee, Arts for the Handicapped, responding to a need to investigate the impact of the arts on the development of basic skills of handicapped children, conceived the Arts in Education Project. Rooted in the belief that arts experiences can increase cognitive development as well as enhance aesthetic growth, NCAH designed a research project to develop and measure the effects of an arts-infused curriculum on the academic performance of handicapped children.

A model for infusing the arts into the established curriculum was created along with an Arts for Learning Guide which provides educators with arts strategies for teaching basic learning skills and promoting aesthetic development. The arts-infused curriculum model utilizes all the arts (visual arts, drama/theatre, dance/movement, and music) in an interrelated way to teach basic learning skills (gross motor development, sensory motor integration, perceptual motor integration, language development, conceptual skills development, and social skills development) and aesthetic development (awareness, imitation, self-initiation, skill development, and critical judgment). (Figure 1)

During the first year of Project AIE, teachers in five elementary schools in the Clover Park School District in Tacoma, Washington participated by collecting student data and contributing lessons towards the development of a Model and Guide. Traditional research procedures were used and experimental and control groups were randomly assigned. Experimental groups were treated with arts activities infused into the established curriculum. The Peabody Individual Achievement Test was used for pre and post testing on experimental and control groups as a measure of cognitive growth. Treatment of the resulting data with analysis of covariance was chosen as the most conclusive procedure. While findings using subtest scores were all in the expected direction, they did not reach the .05 level of significance. However, the results of the analysis of covariance with total test scores was significant beyond the .05 level of significance. The time lapse between pre and post testing was five months.

Figure 1

ARTS FOR LEARNING CONCEPTUAL MODEL



The conceptual model illustrates the three major areas of emphasis for an arts infused program. The Arts are represented on one dimension; within each art form are several categories. The Basic Learning Abilities are classified on another dimension; sub-sumed under each of these categories are additional learning skills. Five levels of Aesthetic Development are represented on the third dimension. The arts infused curriculum model indicates the interaction among the five levels of aesthetic development, the four major art forms and the basic learning abilities.

In the second year of Project AIE, the research was extended to three sites in widely separated communities in Clover Park, Washington; St. Louis, Missouri; and New Haven, Connecticut. The data base was increased to include a larger age group and a variety of handicapping conditions. Using a norm referenced approach to interpreting the data from the Peabody Individual Achievement Test, the students showed consistent gains in all areas at all sites but one in which maintenance in math occurred. The magnitude of the gains were small but consistent, averaging four standard score points and a percentile rank increase of four. The time lapse between pre and post testing was six months. In addition to administering the PIAT to students, data were collected from teachers to assess their perceptions of students' aesthetic growth. The results of these evaluations were encouraging with consistently increasing ratings of student competencies and skills for the combined sites.

During the second year, teachers experimented with the Model and Guide activities; revision and refinements were made which formed the basis for the final Arts for Learning Guide field tested in fourteen school districts across the country in the Third Year Project activities. Special education, arts, and regular education teachers were included as well as students ages 2 to 21, with physical and sensory disabilities, moderate to severe mental deficits, and emotional and behavioral disorders. Specific instrumentation was developed to determine the efficacy of the Model and Guide itself, the perceptions of administrators with respect to teacher utilization of the Guide, and detailed information on the utility of the activities. Results of these evaluations indicated that the teachers felt the Guide could improve the skills of children in all the areas of basic learning abilities. Teachers, administrators, and university personnel found the Guide and Model to be comprehensive, well organized and presented in a utilitarian format. In addition, the University respondents indicated they would use the Guide as a tool in teacher training.

In the three years of this innovative and developmental research project, a large volume of data has been accumulated, much has been learned and many new research questions have been generated. An important contribution has been made to the body of knowledge about new techniques for teaching handicapped children.

INTRODUCTION

✓ The meaning and significance of life is intimately related to the ability of each of us, regardless of social status, to manifest his uniqueness. Dr. Edwin Martin, the Deputy Commissioner of the Bureau of Education for the Handicapped (DHEW), has reminded us that "as educators (we must) focus more carefully on the individual and his or her uniqueness..." Those who work with the handicapped believe that creative arts play a crucial role in providing for individual uniqueness. It is both natural and fitting that the Bureau of Education for the Handicapped, with its emphasis on individuality, and the National Committee, with its focus on creativity, respond to Dr. Martin's far sighted observation, "The challenge of the next decade...will be to reawaken our hearts and our spirits to the individual nature of each handicapped or gifted child." (Martin, 1978)

RATIONALE

Special Education as a discipline is undergoing a major upheaval. Since the passage of P.L. 94-142 in 1975, the professional community has been challenged to produce new methodologies, new programs and new research to meet the needs of all handicapped children. It was in this atmosphere of change and challenge that The National Committee, Arts for the Handicapped began the Arts in Education Project in October of 1976.

This Project had a two part focus: the development of an arts-infused curriculum model and the assessment of its impact on the cognitive, social and aesthetic growth of handicapped children. The Project employed a traditional research design, utilizing pre and post testing with a standardized instrument and random assignment to control and experimental classrooms.

The rationale for the Project was rooted in three major concerns: the need to respond to the mandate of P.L. 94-142, the educational trend of "Back to Basics" and the status of arts research involving handicapped children.

Response to P.L. 94-142

Congress, in mandating a National commitment to the education of all handicapped children made an equally important statement regarding the inclusion of the arts in the special education program. The following excerpt from Senate Report Number 94-169 reflects the firm conviction of the U.S. Congress that the arts should have a central role in educational programming for handicapped children.

"The use of the arts as a teaching tool for the handicapped has long been recognized as a viable, effective way not only of teaching special skills, but also of reaching youngsters who had otherwise been unteachable. The Committee envisions that programs under this bill could well include an arts component and, indeed, urges

that local educational agencies include the arts in programs for the handicapped under this Act. Such a program could cover both appreciation of the arts by the handicapped youngsters and the utilization of the arts as a teaching tool per se."

Back to Basics

Three years ago, educators from all parts of the country were expressing alarm at declining test scores at every educational level. Educational innovation was being attacked, and there were repeated calls for a return to the traditional modes of instruction, for a rejection of experimentation. The rallying cry was "Back to Basics!".

The AIE Project whose purpose was to focus on the development of an arts-infused curriculum model for handicapped children and the assessment of its impact on their cognitive and aesthetic growth is in fact a back to basics approach.

David Rockefeller, Jr., writing in the report of the work of The Arts, Education and Americans Panel, said:

"This Panel supports the concept of 'basic education', but maintains that the arts, properly taught, are basic to individual development since they more than any other subject awaken all the senses - the learning pores. We endorse a curriculum which puts 'basics' first, because the arts are basic, right at the heart of the matter.

The arts provide unique ways of knowing about the world and should be central to learning for this reason alone."*

Many philosophers and educators - proponents of arts-for-education have preceded Rockefeller: Gesell and Ilg (1943) in their work "Infant and child in the Culture of Today" give countless examples of creative arts experiences as being critical in the physical, emotional and intellectual development of a child. Lowenfeld (1957) in his work "Creative and Mental Growth" clearly established a connecting link between arts activities and cognitive development. Winifred Ward, America's first lady of "drama-for-children" spent a lifetime advocating its use as a teaching strategy. Furthermore, dance class participation

*Page 6. Coming to Our Senses, McGraw-Hill, 1977.

has been cited as a useful technique for improving coordination skills, increasing attention span, developing self-awareness and learning appropriate social behaviors (Goodrow, 1968).

In a study of movement and music experiences for subnormal adolescent girls, there was evidence of greater interest in language and a more creative and independent attitude (Groves, 1968).

Fink (1968) reported on the results of an experimental dance program for retarded persons and cited increased body coordination, language development, concept development and ability to listen and follow directions.

Calder (1972), reviewing research on the impact of dance in programs for retarded persons, concluded that positive effects were seen in behavior and in other areas of educational programming.

Other studies by Cotter and Spradlin (1971), Gitter (1972), McClelland (1970), and Srisopark (1971) all point to the social and academic achievements of mentally retarded individuals via the use of an art form as a medium for teaching basic skills.

Status of Arts Research

A paucity of research has been done on the use of arts in special education settings. Kalenius (1977) in reviewing the research literature reported that in 554 references to arts studies and handicapped children, only 138 showed relevant findings. Of the 138, only 46 contained information which could be generalized as possible research. However, of those that were considered research, music, dance, and visual art were considered to encourage the intellectual and social development of handicapped children. The literature showed, for example, that learning to play an instrument, and perform before an audience, enhances the quality of life for handicapped children.

Kalenius also indicated that his review of the literature revealed a lack of systematic infusion of all the arts into the basic special education curriculum. Specifically, he found that there has been poor definition of terms, lack of communication between arts educators and special educators, poor techniques for analyzing anecdotal and basic research studies. The bulk of arts research focused on visual arts and music in the area of mental retardation, with other art forms and other handicapping conditions receiving little research interest.

The Saturday Review (1977) devoted its cover story to arts-infused curriculum and showed that it works - citing increased achievement levels. The Review cited numerous recent studies which indicated a national trend to integrate the arts into education of all children, handicapped and non-handicapped as well.

Additionally, nationally recognized educators and researchers have noted the important role that the arts serve in the emotional, social, physical and mental development of handicapped children and youth. For example:

1. The arts are alternative learning approaches for children whose problems interfere with their adjustment to more traditional classroom situations (Bloom, 1976).
2. Essential work behaviors and important skills for successful work performances can be learned through involvement in the arts (Goldstein, 1977).
3. The arts can be a medium of communication and of stimulating experiences for children with sensory impairments (Perks, 1977).
4. Arts activities can reveal the conflicts and tensions of children with behavioral and emotional problems and can enable teachers and parents to deal with them in a more understanding way (Perks, 1977).
5. The arts help to meet the deep need for personal expression that is experienced by all individuals (Rockefeller, 1977).

In summary, the status of arts research in special education has been limited. The AIE Project performed rigorous research on an arts-infused curriculum for handicapped children. The "back to basics" was addressed by the AIE Project with its focus on the development of a hierarchy of social, emotional, and conceptual skills necessary for cognitive and aesthetic development. The response to P.L. 94-142 necessitated the investigation of new strategies and approaches for teaching handicapped children through the use of the arts. The AIE Project focused on developing an Arts in Education conceptual model and curriculum for teaching handicapped children.

IV. DEFINITIONS

HANDICAPPED CHILDREN: children who need special education and related services because they are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or otherwise health impaired, or have specific learning disabilities.

THE ARTS

ARTS: the term "arts" includes, but is not limited to, music (instrumental and vocal), dance, drama, folk art, creative writing, architecture and allied fields, painting, sculpture, photography, graphic and craft arts, industrial design, costume and fashion design, motion pictures, television, radio, tape and sound recording, and the arts related to the presentation, performance, execution, and exhibition of such major art forms. The arts, as used in this project, refer to the widest possible range of activities: formal/informal, impressive/expressive, technical/spontaneous, simple/sophisticated, unique/on-going, traditional/unusual, product oriented/process oriented.

ARTS INFUSED CURRICULUM: a course study in which arts activities (drama, visual arts, music, dance) are employed in a systematic manner to increase basic learning skill and abilities.

ARTS INFUSED CURRICULUM MODEL: The three dimensional model (Figure 1) portrays the interaction among each of the arts forms, levels of aesthetic development and basic learning skills and abilities.

VISUAL ARTS: pertains to drawing, painting, textiles and crafts. Line, texture, balance, shape, repetition and color are a few of the basic components.

MUSIC: involves sound and movement. Some elements are tone, pitch, melody, harmony, time, meter, measure, tempo and rhythm.

DANCE/MOVEMENT: encompasses use of space, effort, time and flow. Balance and rhythm are usually involved.

DRAMA/THEATRE: stems from the Greek word "do". It involves action: players, a setting, a script or an idea. Generally an audience, formal or informal is present. Some fundamental elements are characterization, concentration and conflict.

THE AESTHETIC LEVELS

LEVELS OF AESTHETIC DEVELOPMENT: the five levels - awareness, imitation, self-initiation, skill development and critical judgement, are akin to and parallel several theories of child development: Piaget and Inhelder (1969) develop a progression from sensory awareness through imitation, exploration, mastery and critical analysis that supports the use of these levels. Lowenfeld and Brittain (1964) and Maslow (1967) and Erickson (1963) also concur: Individuals first experience their environ-

ment through their senses (awareness). The infant explores by tasting, touching and looking. As the child develops, he mimics (imitation) those around him. He speaks the same language and patterns his actions after those in his immediate society. Soon, however, he begins to create new sentences (self-initiation). He combines words and concepts in a unique, individualistic manner. Shortly thereafter--in speech, in games and in conduct--the child attempts to gain some mastery over his environment (skill development). Finally, the child develops the ability to evaluate (critical judgement). He internalizes moral principles and he establishes standards.

AWARENESS: a conscious realization or appreciation of what is perceived or felt.

IMITATION: the reproduction or mimicry of an object, action or behavior.

SELF INITIATION: to create or act from individual or personal motivations or impulses.

SKILL DEVELOPMENT: the conscious application of effort to gain mastery or expertise.

CRITICAL JUDGMENT: the ability to reflect and evaluate relative to some standard or ideal.

THE LEARNING ABILITIES

BASIC LEARNING ABILITIES: psycho-motor, cognitive or affective skills which enable an individual to function comfortably and effectively in society.

GROSS MOTOR DEVELOPMENT: the development and awareness of large muscle activity.

SENSORY MOTOR INTEGRATION: the psychophysical integration of fine and gross motor activities.

PERCEPTUAL MOTOR SKILLS: the functional utilization of primary auditory, visual, and visual-motor skills.

LANGUAGE DEVELOPMENT: the current functional stage of total psycho-linguistic development.

CONCEPTUAL SKILLS: The functional level of concept attainment and general reasoning ability.

SOCIAL SKILLS: the skills involved in social problem solving.

COMPONENTS OF BASIC LEARNING ABILITIES

GROSS MOTOR DEVELOPMENT

The development and awareness of large muscle activity.

1. Rolling
 - A. The ability to roll one's body in a controlled manner.
 - B. From a prone position, with arms over head, pupil can roll from back to stomach. Pupil can do sequential rolling to right and left, can roll down hill or incline.
2. Sitting
 - A. The ability to sit erect in normal position without support or constant reminding.
 - B. Pupil can demonstrate proper poise in sitting at desk with feet on floor, back straight, and head and arms in correct position for work at hand.
3. Crawling
 - A. The ability to crawl on hands and knees in a smooth and coordinated way.
 - B. With eyes fixated on target, pupil first crawls in homolateral fashion. Pupil progresses to cross-pattern crawling program.
4. Walking
 - A. The ability to walk erect in a coordinated fashion without support.
 - B. With head up and shoulders back, pupil walks specified path and walking line. Can walk backward and sideways without difficulty.
5. Running
 - A. The ability to run a track or obstacle course without a change of pace.
 - B. Pupil runs a straight track of easy distance without difficulty. Can change direction through a simple obstacle course without stopping or significantly changing pace.
6. Throwing
 - A. The ability to throw a ball with a reasonable degree of accuracy.
 - B. Pupil throws a ball to another person so that it may be caught. Can throw ball accurately into box or basket.

7. Jumping
 - A. The ability to jump simple obstacles without falling.
 - B. Pupil can jump from chair to floor without difficulty. Can jump from jumping board without falling. Can jump over knee-high obstacles.
8. Skipping
 - A. The ability to skip in normal play.
 - B. Pupil can skip, alternating feet, around circle of players. Can skip rope forward both by hopping and alternate-foot skipping.
9. Dancing
 - A. The ability to move one's body in coordinated response to music.
 - B. In young children, free movement and eurhythmic expression. Progression to more formal dance steps with older pupils.
10. Self-Identification
 - A. The ability to identify one's self.
 - B. Pupil can identify self by name, respond to name when called, identify self in pictures and mirrors.
11. Body Localization
 - A. The ability to locate parts of one's body.
 - B. Pupil can locate eyes, hands, mouth, hair, nose, feet, eyebrows, fingernails, shoulders, elbows, knees, back, neck, chin, forehead, wrist, arms, legs, toes.
12. Body Abstraction
 - A. The ability to transfer and generalize self-concepts and body localizations.
 - B. Pupil can identify others by names and pictures. Can locate body parts on others, generalize to pictures, complete body picture puzzles.
13. Muscular Strength
 - A. The ability to use one's muscles to perform physical tasks.
 - B. Pupil can touch floor from standing position. From prone position can sit up and touch toes. Can raise legs off floor from prone position for few seconds. Can do one push-up and chin self from bar.

14. General Physical Health

- A. The ability to understand and apply principles of health and hygiene and evidence good general health.
- B. Pupil has good personal health and hygiene habits - no chronic absences for health reasons, no unusual accidents or health history, no significant physical disabilities interfering with learning.

SENSORY - MOTOR INTEGRATION

15. Balance and Rhythm

The psychophysical integration of fine and gross motor activities.

- A. The ability to maintain gross and fine motor balance and to move rhythmically.
- B. Pupil is able to balance on balance board or rail. Can move rhythmically in playing jacks and in bouncing on trampoline or spring.

16. Body-spatial Organization

- A. The ability to move one's body in an integrated way around and through objects in the spatial environment.
- B. Pupil can run maze on playground or in classroom without bumping. Can move easily through tunnels and use playground monkey bars, can imitate body positions in space.

17. Reaction-Speed Dexterity

- A. The ability to respond efficiently to general directions or assignments.
- B. Pupil can attend to the teacher sufficiently to comprehend total directions. Can proceed to organize self and respond adequately to complete the given assignment within a normal time expectancy.

18. Tactile Discrimination

- A. The ability to identify and match objects by touching and feeling.
- B. With hidden toys and materials, pupil can match objects with both left and right hands, name or classify materials or substances, differentiate weights, discriminate temperatures.

19. Directionality

- A. The ability to know right from left, up from down, forward from backward, and directional orientation.
- B. Pupil can write and follow picture story or reading material from left to right, discriminate right and left body parts and those of other people, locate directions in room and school.

20. Laterality

- A. The ability to integrate one's sensory-motor contact with the environment through establishment of homolateral hand, eye, and foot dominance.
- B. Pupil has consistent right- or left-sided approach in use of eyes, hands, and feet in tasks such as kicking ball, cutting paper, sighting with telescope.

21. Time
Orientation

- A. The ability to judge lapses in time and to be aware of time concepts.
- B. Pupil is prompt in attending class, completing timed assignments, and following directions. Pupil is aware of day, month, year, time of day, and seasons.

PERCEPTUAL-MOTOR
SKILLS

The functional utilization of primary auditory, visual, and visual-motor skills.

22. Auditory Acuity

- A. The ability to receive and differentiate auditory stimuli.
- B. Pupil responds functionally to watch tick, hidden sound toys, and general normal conversational directions. Pupil has no significant decibel loss.

23. Auditory Decoding

- A. The ability to understand sounds or spoken words.
- B. Pupil can follow simple verbal instructions, can indicate by gesture or words the meaning or purpose of auditory stimuli such as animal sounds, nouns, or verbs.

24. Auditory-vocal
Association

- A. The ability to respond verbally in a meaningful way to auditory stimuli.

- B. Pupil can associate with verbal opposites, sentence completion or analogous verbal responses.
24. Auditory-vocal Association
- A. The ability to respond verbally in a meaningful way to auditory stimuli.
- B. Pupil can associate with verbal opposites, sentence completion or analogous verbal responses.
25. Auditory Memory
- A. The ability to retain and recall general auditory information.
- B. Pupil can act out (charades) Santa Claus, simple plots of common nursery rhymes ("Jack and Jill"), can verbally relate yesterday's experiences, meals, television and story plots.
26. Auditory Sequencing
- A. The ability to recall in correct sequence and detail prior auditory information.
- B. Pupil can imitate specific sound patterns, follow exactly complex series of directions, repeat digit and letter series.
27. Visual Acuity
- A. The ability to see and to differentiate meaningfully and accurately objects and symbols with coordinated eye movements.
28. Visual Coordination and Pursuit
- A. The ability to follow and track objects and symbols with coordinated eye movements.
- B. With head steady, pupil can move eyes to fixate on stable objects in varied places, pursue moving objects, such as finger positions, follow picture and word stories left to right without jerky movements.
29. Visual-Form Discrimination
- A. The ability to visually differentiate the forms and symbols in one's environment.
- B. Pupil can match identical pictures and symbols such as abstract designs, letters, numbers, and words.

30. Visual Figure-Ground
Differentiation

A. The ability to perceive objects in the foreground and background and to separate them meaningfully.

B. Pupil can differentiate pictures of self and friends from group picture, differentiate objects in "front" and "back" part of pictures and mock-ups, differentiate his name from among others on paper or chalkboard, perceive simple forms and words embedded in others.

31. Visual Memory

A. The ability to recall accurately prior visual experiences.

B. Pupil can recall from visual cues where he stopped in book, can match or verbally recall objects removed or changed in the environment, can match briefly exposed symbols.

32. Visual-Motor
Memory

A. The ability to reproduce, motor-wise, prior visual experiences.

B. Pupil can draw designs and symbols following brief exposure, can reproduce letters, numbers, simple words on demand, can portray prior objects or events through gestures or drawings, can reproduce varied patterns, and identify hidden materials.

33. Visual-Motor
Fine Muscle
Coordination

A. The ability to coordinate fine muscles such as those required in eye-hand tasks.

B. Pupil can write legibly, trace, and imitate precise body movements without difficulty, can cut, manipulate and judge fine physical responses without gross errors.

34. Visual-Motor
Spatial-Form
Manipulation

A. The ability to move in space and to manipulate three-dimensional materials

B. Pupil can build block houses and designs, draw three-dimensional pictures, complete shop and craft projects, integrate form and space puzzles.

35. Visual-Motor
Speed of Learning

- A. The ability to learn visual-motor skills from repetitive experience.
- B. Pupil can respond with increasing speed to rote learning tasks such as copying digit or letter sequences, spelling, specific arithmetic processes, and gross motor skills such as jumping over a rope.

36. Visual-Motor
Integration

- A. The ability to integrate total visual-motor skills in complex problem solving.
- B. Pupil can play complex team sports, swim, draw accurate pictures, including people, may play musical instrument, write extended letters, move freely about neighborhood and community.

LANGUAGE DEVELOPMENT

The current functional stage of total psycho-linguistic development.

37. Vocabulary

- A. The ability to understand words.
- B. Pupil has a basic receptive vocabulary in accord with chronological age and educational opportunity.

38. Fluency and
Encoding

- A. The ability to express oneself verbally.
- B. Pupil can communicate verbally, has average fluency of speech without undue hesitation or stuttering, uses coherent sentence structure.

39. Articulation

- A. The ability to articulate words clearly without notable pronunciation or articulatory problems.
- B. Pupil uses words with correct pronunciation of initial, medial, and final sounds.

40. Word Attach
Skills

- A. The ability to analyze words phonetically.
- B. Pupil can make proper phonetic associations, break down words phonetically, recognize component words.

41. Reading Comprehension

- A. The ability to understand what one has read.
- B. Pupil can recall story and paraphrase plot, can explain or relate meaningfulness of what has been read.

42. Spelling

- A. The ability to express oneself through written language.
- B. Pupil can write simple sentences and communicate ideas through paragraph, letter, story, or essay.

43. Spelling

- A. The ability to spell in both oral and written form.
- B. Pupil spells within general age expectancy.

CONCEPTUAL SKILLS

The functional level of concept attainment and general reasoning ability.

44. Number Concepts

- A. The ability to count and use simple numbers to represent quantity.
- B. Pupil can count forward and backward to 100, count by two's, group simple quantities upon request.

45. Arithmetic Processes

- A. The ability to add, subtract, multiply and divide.
- B. Pupil can demonstrate knowledge of basic processes within expectation of his chronological age.

46. Arithmetic Reasoning

- A. The ability to apply basic arithmetic processes in personal and social usage of problem solving.
- B. Pupil can purchase goods and account for funds, knows coinage and exchange, can calculate time differentials, understand weights and measures.

47. General Information

- A. The ability to acquire and utilize general information from education and experience.
- B. Pupil is aware of major local and national current events, knows local geography, has concept of city, state, and nation.

48. Classification

- A. The ability to recognize class identities and to use them in establishing logical relationships.
- B. Pupil can sort objects by classification, recognize subclasses, verbalize common elements in class identity.

49. Comprehension

- A. The ability to use judgment and reasoning in common sense situation.
- B. Pupil responds to factual reasoning when situation is explained to him, can recognize alternatives in situations and can judge actions accordingly, can identify logical reason for given actions.

SOCIAL SKILLS

The skills involved in social problem solving

50. Social Acceptance

- A. The ability to get along with one's peers.
- B. Pupil can relate meaningfully to others and is accepted in both one-to-one and group situations.

51. Anticipatory Response

- A. The ability to anticipate the probable outcome of a social situation by logical inference.
- B. Pupil can predict the consequences of his own behavior and that of others in given situations.

52. Value Judgments

- A. The ability to recognize and respond to moral and ethical issues.
- B. Pupil has a sense of right and wrong, controls own actions, demonstrates proper behavior.

53. Social Maturity

- A. The ability to assume personal and social responsibility.

V. PROJECT GOAL AND OBJECTIVES

PROJECT GOAL AND OBJECTIVES

Project Goal

The overall goal for Project AIE is to expand opportunities for arts education for handicapped children and youth.

Project Objectives

Year One

1. To Develop an Arts Infused Education Curriculum Model for the Handicapped Child.
2. To Developmentally Test the Curriculum Model with Special Education Children at One Pilot Site.
3. To Plan for a More Extensive Assessment of the Curriculum Model through Establishment of a Data Base.

Year Two

1. To Test the Arts Infused Model with Special Education Students at Three Geographically Different Sites.
2. To Modify and Refine the Arts Infused Curriculum Model and Arts for Learning Guide.
3. To Collect and Analyze Data That Will Assess the Impact of an Arts Infused Curriculum on the Education of Handicapped Children.

Year Three

1. To Field Test the Curriculum Model at Fourteen Geographically Different Sites.
2. To Invite Critical Appraisal of the Curriculum Model by Arts and Special Education Personnel.
3. To Plan and Implement National Dissemination Strategies.

VI. PROJECT ORGANIZATION

PROJECT AIE

NATIONAL ADVISORY COMMITTEE

*Melville Appell, Education Program Specialist
Bureau of Education for the Handicapped

*Harold Arberg, Ph.D., Director
Arts and Humanities Division
Office of Education

Mona Bailey, Assistant Superintendent
Office of State Superintendent of Public Instruction
Olympia, Washington

Barbara Given, Ph.D., Associate Professor
George Mason University
Fairfax, Virginia

Jack Kukuk, Assistant Director
Alliance for Arts Education

John Mahlmann, Ph.D., Executive Director
National Art Education Association

Shaun McNiff, Ph.D., Director
Expressive Arts Therapies Program
Director, Integrated Arts in Education Program
Lesley College

Bruce Piland, Ph.D., Coordinator
Elementary Special Education
Clover Park School District

Bennett Tarleton, Program Coordinator
National Aesthetic Education Learning Center

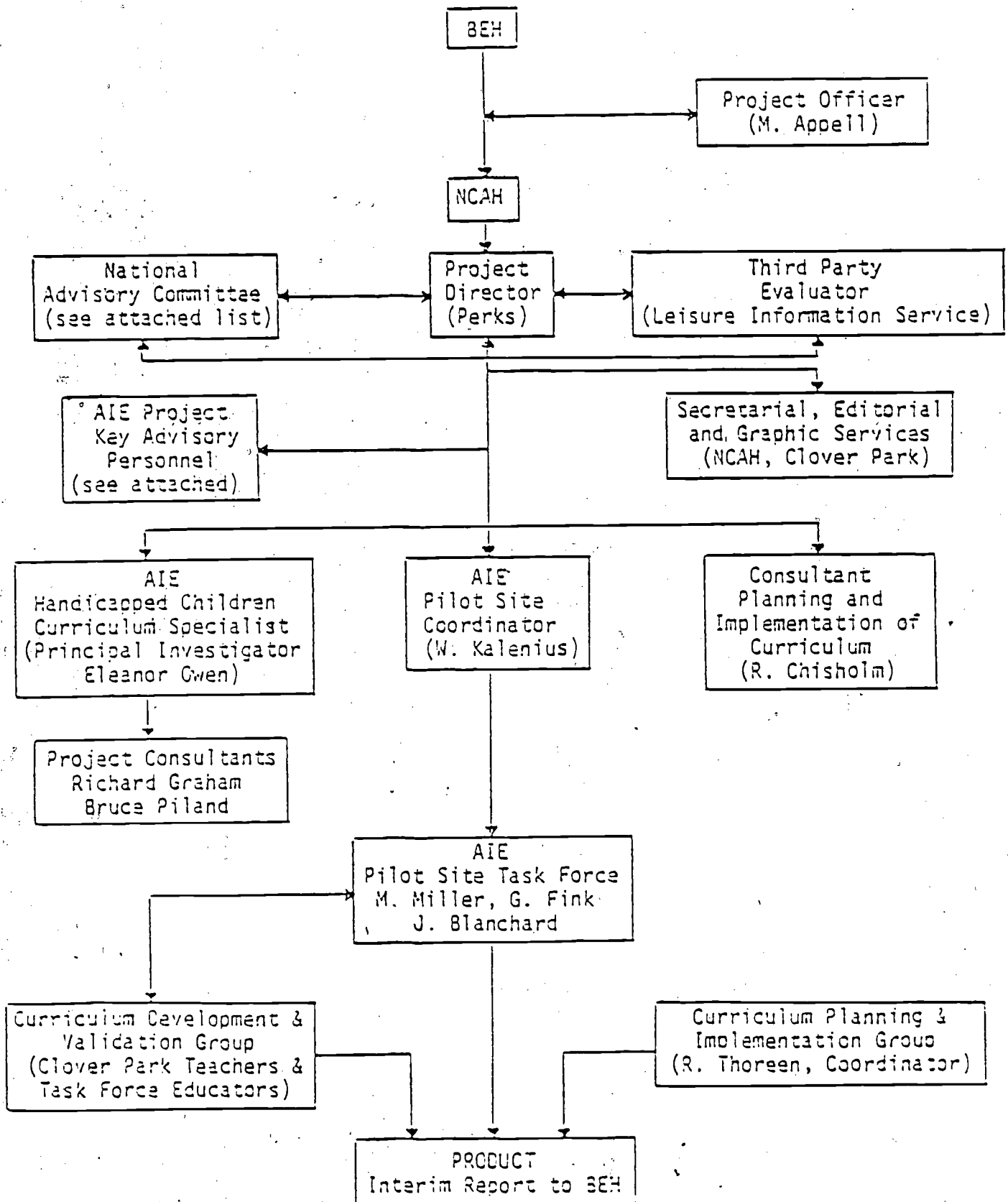
William Schipper, Ph.D., Associate Director
National Association of State Directors of Special Education

Claudine Sherrill, Ph.D., Professor
College of Health, Physical Education and Recreation
Texas Women's College
BEH Project Director, Creative Arts and Service Education Project

Lewis Shupe, Ph.D., Associate Professor
Art Therapy and Speech Pathology
Wright State University

*Ex Officio

AIE PROJECT
ORGANIZATIONAL CHART



YEAR ONE

AIE PROJECT

Job Descriptions for Key Staff Members and Advisory Personnel
Arts in Education for Handicapped Children

1. Project Director

Select staff
Make final decisions for pilot test site
Make final decision for project design
Apportion budget
Oversee distribution of funds
Conduct key staff conferences
Maintain continuous contact with principal investigator
at pilot test site
Select evaluation team
Coordinate transmittal of data to evaluation team and
other key staff members
Prepare interim and first year end report
Prepare and conduct evaluation conference at end of first
year
Prepare continuation proposal for second year

2. National Advisory Committee

Provide periodic advice and support to the Project Director
during the first year implementation of the program
Critically review mid-year and final reports providing
guidance relative to the development of the project
Assist in development of plans and activities for years
two and three of the project
Visit the pilot site (when it is economically feasible)
to review the development of the arts infused curriculum
model

3. Third Party Evaluator

Provide advice to the Project Director on the project design
and data collection
Assist with the conceptualization and planning for second
and third year of project activities
Serve as third party evaluator of project performance in
meeting stated objectives
Provide editorial and graphic design services to assist in
the development of the curriculum project and interim
report at the conclusion of the first year

4. Key Advisory Personnel

Provide expertise and guidance to the Project Director during planning and implementation of the project
Visit pilot site during the first year to provide a critical review of the project development
Assist in identification of related project materials
Critically review interim, progress and final progress reports

5. Curriculum Specialist/Principal Investigator

Supervise collection of descriptive project related materials
Schedule and coordinate testing efforts with teachers
Coordinate orientation sessions for curriculum development group
Coordinate development of arts infused curriculum model
Prepare finalized curriculum model
Keep log on teacher activities
Keep log on continuous evaluation of teachers
Participate in staff conferences
Recommend use of curriculum consultants
Assist in second year plans
Prepare instructional and planning implementation guide outlines
Assist in preparation of all interim, progress and final reports

6. Project Pilot Site Coordinator

Coordinate overall implementation of project at pilot site
Administer distribution of funds at pilot site
Coordinate preliminary planning meetings
Assist Pilot Site Task Force and Administration Consultant in planning an introductory meeting and workshops for area administrators, teachers, supervisors
Assist in collection of data pertaining to teachers and students

7. Planning, Administration and Implementation Consultant

Assist in developing relationships with administrators and supervisors
Provide assistance in developing guide needed to resolve planning and administrative concerns
Attend staff meetings
Visit and observe curriculum use at pilot test site
Review all materials related to finalized curriculum model

8. Planning and Implementation Coordinator

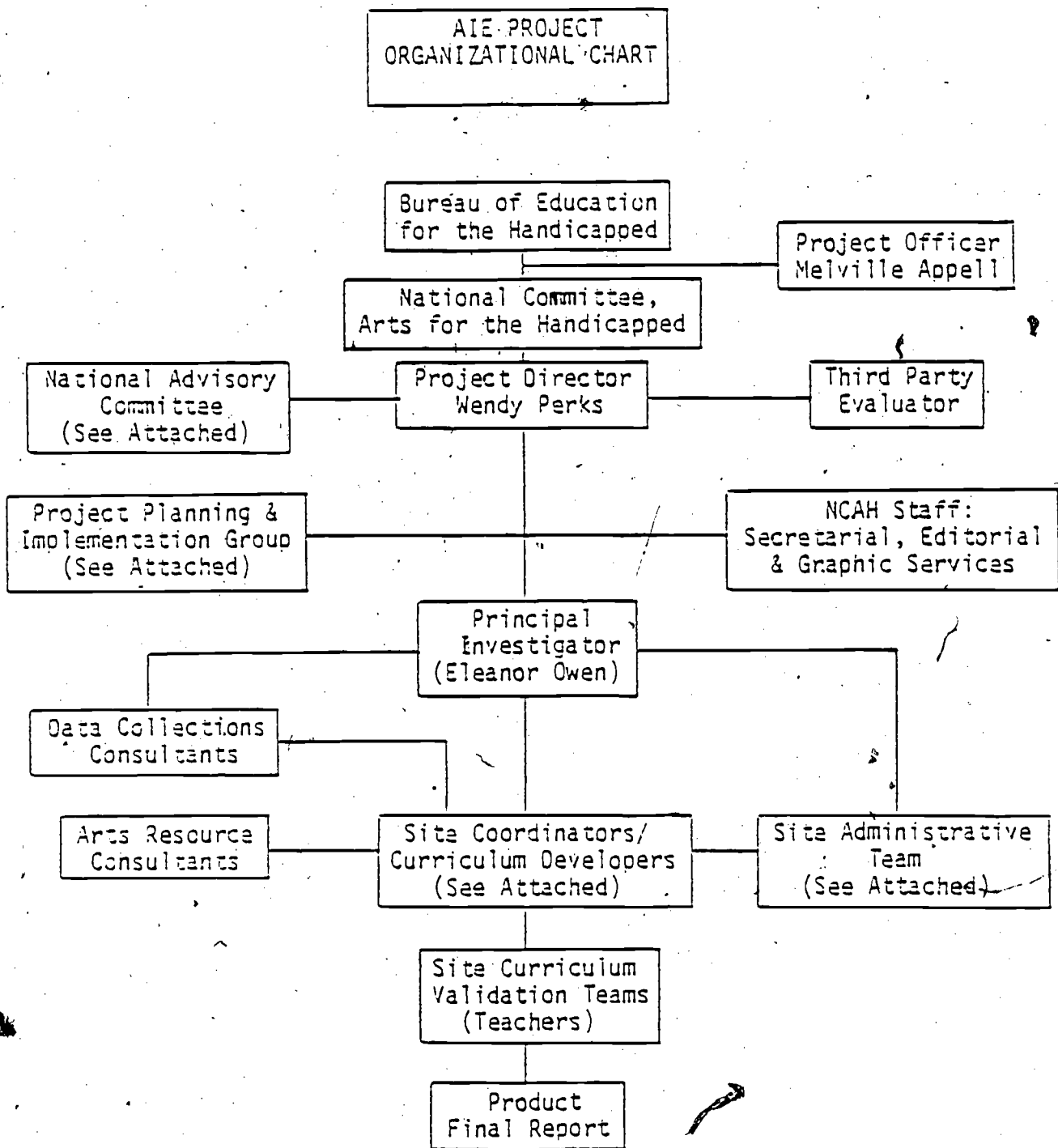
Act as a liaison between the Administrative Consultant,
Principal Investigator and Pilot Site Coordinator
Assist Principal Investigator in all areas related to
implementation of project and preparation of necessary
reports, papers, documentation strategies
Coordinate special activities, conferences and workshops
related to AIE project
Participate in staff conferences
Provide expertise and guidance regarding Pilot Site school
district (curriculum, staffing, special projects)

9. Project Pilot Site Task Force

This initial Task Force will join the Curriculum Development Group when the experimental group of teachers has been selected. Members of the AIE Task Force have been selected for their expertise in the area of arts and curriculum development. Task Force members are key personnel and are directly responsible for the development, implementation and completion of the AIE Project.

10. Consultant(s) to the Curriculum Specialist

Assist in identification of all related project materials
(research, model programs, materials, etc.)
Provide advice on the development of the arts infused
curriculum model
Visit and observe curriculum use at pilot test site
Review all materials related to finalized curriculum model
Assist in plans for second year of project



YEAR TWO

Project Job Descriptions Key Project Personnel and Advisory Groups

1. Project Director

- Select staff
- Make final decisions about test sites
- Make final decision regarding project design and implementation
- Apportion budget
- Oversee distribution of funds
- Conduct key staff conferences
- Maintain continuous contact with Principal Investigator
- Select evaluation team
- Coordinate transmittal of data to evaluation team and other key staff members
- Oversee interim and final reports
- Prepare and conduct necessary implementation throughout the year
- Maintain communication with advisory and key project personnel

2. National Advisory Committee

- Provide periodic advice and support to the Project Director during the second year implementation of the program
- Critically review mid-year and final reports providing guidance relative to the development of the project
- Assist in development of plans and activities for further dissemination of final project results
- Be available to visit the pilot site to review the development of the arts infused curriculum model

3. Third Party Evaluator

- Provide advice to the Project Director on the project design and data collection
- Collect and analyze final research results
- Prepare a written report of those results as third party evaluator on the project performance in meeting stated objectives

4. Planning and Implementation Group

- Provide expertise and guidance to the Project Director during planning and implementation of the project
- Provide a critical review of the project development
- Assist in identification of related project materials
- Critically review interim, progress and final reports
- Provide editorial and graphic design services to assist in development of project reports and other related project materials

5. Curriculum Specialist/Principal Investigator

Supervise collection of descriptive project related materials and all other project data
Schedule and coordinate testing efforts with site coordinators
Coordinate orientation and evaluation sessions for site coordinators
Coordinate refinement of arts infused curriculum model
Keep log on site coordinators
Participate in key staff conferences
Recommend use of arts and data collection
Assist in preparation of all interim, progress and final reports
Supervise and assist all site coordinators in project implementation

6. Site Coordinators

Coordinate overall implementation of project at project site
Recommend distribution of funds at pilot site
Coordinate and conduct preliminary planning meetings
Consult in planning orientation and evaluation sessions and workshops for project administrators, teachers, supervisors, consultants
Supervise collection of data pertaining to teachers and students
Coordinate project implementation with site Administrative Team
Involve arts resource personnel in project implementation
Keep log on continuous teacher evaluation of curriculum
Keep log on teacher activities
Keep log on key meetings and conferences
Conduct and coordinate ongoing orientation and evaluation sessions with curriculum development teams
Collect and analyze teacher log books
Meet with the Principal Investigator to assist in preparation of final report

7. Administrative Team

Assist in developing relationships with administrators, supervisors, teachers
Provide assistance in referring guide needed to resolve planning and administrative concerns
Attend key staff meetings
Visit and observe curriculum use at test site
Review all materials related to finalized curriculum model
Administer distribution of funds at pilot site
Assist site coordinator in all areas related to implementation of project and preparation of necessary reports, papers, documentation strategies

Assist in coordination of special activities, conferences and workshops related to AIE project
Provide expertise and guidance regarding project site school district (curriculum, staffing, special projects)

8. Arts Resource Consultants

Provide expertise and guidance to site coordinators in project implementation
Attend key staff conferences
Assist in identification of all related project materials (research, model programs, materials, etc.)
Visit and observe curriculum use at project site

9. Data Collection Consultants

Collect all teacher and student data as directed by site coordinator and principal investigator
Provide expertise and guidance in testing protocol

10. Site Curriculum Validation Teams (Classroom Teachers)

Work in cooperation with the site coordinator and administrative team to refine and validate curriculum model
Maintain log of all curriculum activities
Attend key conferences and workshops
Participate in final review and evaluation of curriculum model
Complete an attitude and competency test
Cooperate with data collection consultants
Use the arts infused curriculum Instructional Guide in class
Keep a log book of suggested revisions and modifications
Keep a continuous progress report form for each child
Meet individually with site coordinators

YEAR THREE

Job Descriptions for AIE Project Participants Arts in Education for Handicapped Children

Project Director

- Make final decision re advisory group
- Make final decision re field test sites
- Make final decision re field test site Master Teachers
- Make final decision re field site Administrative Liaison Personnel
- Select Data Consultant
- Select Third Party Evaluator
- Select Curriculum Consultants
- Apportion budget
- Oversee distribution of funds
- Conduct meetings of AIE Advisory Group
- Conduct meetings of field test staff
- Maintain continuous contact with Project Coordinator
- Oversee interim and final report

Project Coordinator

- Participate in the selection of field test sites
- Participate in the selection of field test site Master Teachers
- Participate in the selection of field test Administrative Liaison personnel
- Maintain continuous contact with field test staff
- Oversee activities of Consultants
- Prepare interim and final report for final approval of Project Director

AIE Advisory Committee

- Provide information, advice and support to the project
- Make critical reviews of the curriculum materials and evaluation materials
- Assist in the development of dissemination plans

Field Test Site Administrative Liaison Personnel

- Complete selection of field test site teachers
- Serve as liaison person between field test site project staff and administration at his/her site
- Coordinate overall implementation of project at his/her site

Field Test Site Master Teachers

Assist in selection of field test site teachers
Conduct orientation meetings with project staff
Supervise the use of the "Arts for Learning" Curriculum Guide by a team of teachers at the field test site
Assist the field test project staff teachers in the implementation of the lessons
Supervise use of assessment forms
Send assessment forms to Project Coordinator at end of each week
Assist in coordination of workshop by regional arts consultants
Conduct periodic meetings with project staff teachers
Maintain communication with project coordinator

Field Test Site Project Staff

Attend orientation meetings on the nature of the project
Use the "Arts for Learning" Curriculum Guide in class
Complete activity evaluation forms and submit to Master Teacher weekly
Attend periodic meetings with Master Teacher
Meet individually with Master Teacher
Participate in workshop by regional arts consultant

Workshop Consultants

Conduct workshops at AIE sites
Make recommendations to Project Investigator regarding effectiveness of teacher use of Arts for Learning Guide
Prepare reports to Project Director

Third Party Evaluator

Collect and analyze all data
Prepare a written report of the results

YEAR ONE

AIE Pilot Site

CLOVER PARK SCHOOL DISTRICT - TACOMA, WASHINGTON

The District has been engaged in providing media and technology services to the State of Washington and the northwest region for several years and more recently, to selected states throughout the nation. The District was one of the first to develop and disseminate Learning Activity Packages, to cooperate with the center at Buffalo, New York, in making Computer Based Resource Units available in the northwest and Pacific, and in establishing a Visually Impaired Depository to serve the needs of partially sighted pupils for enlarged print material.

A local school district, Clover Park is located between Tacoma and Olympia, Washington, and serves between fifteen and eighteen thousand students from a suburban community, McChord Air Force Base, Madigan Army General Hospital and Fort Lewis. Considered an excellent school district nationally, Clover Park has a long history of: 1) operating special education programs; 2) conducting extraordinary innovative projects; and 3) of having more than adequate capabilities and support systems. Clover Park School District has operated a full LEA special education program for over 25 years, with some students integrated into regular classes as well as being in resource rooms and in self-contained classrooms and buildings. For many years teachers have written individual educational program plans for each student in concert with other instructional staff and parents.

Administrative Structure

The Project Director identified and selected key project personnel. The Clover Park administrative staff worked as liaison between the principal investigator, curriculum development team, and data consultants at the site and informed the Project Director of the ongoing process.

8

AIE FIELD SITES

YEAR TWO

CLOVER PARK SCHOOL DISTRICT - TACOMA, WASHINGTON

The AIE Project was housed in Custer Elementary School. There were 74 experimental students and 93 control students. The students were in self-contained special education classrooms in a building that contained regular education students. The project students ranged in disability from moderate MR to multiple handicapped, including emotionally disturbed and hearing impaired.

Administrative Structure

The Special Education Coordinator had responsibility for administration of the Project. The building principal, special education department chairperson and special education coordinator formed the direct administrative structure for the project. The site coordinator had responsibility for coordination of all onsite activities. The district supervisor of art education was a consultant to the project and worked directly with the site coordinator in an advisory capacity.

CELANTANO SCHOOL - NEW HAVEN, CONNECTICUT

The New Haven Children's Museum is a private non-profit museum which supplements the day-to-day operations of the program by supplying artists and guidance to the project.

The Celantano School is a public elementary school which houses both the Preschool Program for Handicapped Children and programs for older handicapped students. There has not been a music or art teacher at the school since its inception in 1971.

The program at Celantano School serves a mixed handicapped population from New Haven and several surrounding communities. The AIE Program was housed in 7 self-contained classrooms. There were 72 students participating in experimental and control groups. Both control and experimental groups consisted of students 3 years 8 months to 20 years old, with moderate to mild retardation and emotional disturbance.

S

Administrative Structure

The administrative model for this site represented a collaborative effort between a children's museum and local schools. The Administrative director had responsibility for administering the project. The Director of the New Haven children's Museum, Assistant Site Coordinator and the Building Principal as well as the Administrative Director were part of the Administration team. The Director of the Children's Museum served as the site coordinator. The assistant site coordinator was a music specialist from the Children's Museum placed at Celantano School to run the day-to-day operations of the project.

CEMREL, INC AND ST. LOUIS SPECIAL SCHOOL DISTRICT - ST. LOUIS MISSOURI

Cemrel, Inc., a St. Louis based national educational laboratory which focuses its efforts primarily in four types of educational work; instructional materials development, research and evaluation, school and community services, and publications and publishing services, had been contracted to operationalize the St. Louis AIE site. The site was managed by personnel with CEMREL's Special Education Group in collaboration with the Special School District of St. Louis County.

The District supplements the other twenty-three St. Louis County school districts by providing special education programs and services to handicapped children throughout St. Louis County. Four special schools within the Special School District participated in Project AIE. Two schools, Park and Westview, were the experimental settings for 78 physically handicapped elementary school aged students found in eight groups. The age range of these students was 5 to 18 with a 10.4 mean. Two centers, Ackerman and Litzsinger schools, acted as the control settings for 81 additional physically handicapped elementary school aged students. The age range of these students was 5 to 17 with a 10.1 mean. Each group of project students was housed in self-contained classrooms.

Administrative Structure

The administrative model for this site represented collaborative effort between a national educational laboratory and a suburban school system. The Administrative director had responsibility for administering the project. The assistant superintendent, department of physically handicapped and both site principals, all from the Special School District, were part of the administrative team along with the Administrative Director.

The project was administered by the educational laboratory and not the local education agency. As a result, the administrative director was in direct control of the project and the building principals at each site were involved in the mechanical operation of the project. Each site had a "head teacher" whose function was to run the day-to-day operations.

AIE FIELD SITES

YEAR THREE

ARLINGTON SCHOOLS - ARLINGTON, TEXAS

The three public elementary schools and one public special education facility participating in the AIE project are located in a suburban neighborhood approximately one hour from Dallas. Of the total number of students, 338 are handicapped with disabilities including emotional disturbances, mild mental retardation, and multiply handicapped. A full range of services which include occupational, physical, and music therapy, speech counseling and diagnostic assessment are provided at the special education school.

Administrative Structure

The principal of the special education facility was the administrative liaison to the project investigator and also communicator to the teachers from the other three schools. The majority of teachers, including the Master Teacher, were from the special education school. The Master Teacher was a full time classroom teacher and provided assistance during non-teaching time.

CELANTANO SCHOOL - NEW HAVEN, CONNECTICUT

This public special education school which was an AIE site during the second year of Project AIE, services 209 trainable mentally handicapped youngsters from the ages of 4 to 21 years. Located in the city of New Haven, Connecticut, the school offers speech therapy, vocational education, and music therapy. Twenty-five special education teachers are assisted by 20 aides.

Administrative Structure

The Administrative Liaison and the Master Teacher for this site was the part-time music therapist who had participated in the AIE project during the second year. Her AIE activities were in addition to her regular classroom responsibilities.

BOARD OF COOPERATIVE EDUCATIONAL SERVICES (BOCES) - CHATAUQUA
COUNTY, NEW YORK

Located in a rural area in the Western part of New York State, this public special education school meets the needs of over 400 children ages 5 to 21 years. Special education teachers work with students who are multiply handicapped, mentally retarded, learning disabled, and emotionally disturbed. A music program, physical, occupational and speech therapy are provided in addition to adaptive aquatics.

Administrative Structure

The classroom teacher for the multiply handicapped students was the Administrative Liaison and the Master Teacher. Her activities for the AIE project were in addition to her regular classroom responsibilities and she provided support to the teachers during non-teaching hours.

CLOVER PARK SCHOOL DISTRICT - TACOMA, WASHINGTON

The original AIE site, Clover Park's participation during this third year extended to nine public schools located in the suburban area of Tacoma, Washington with a school district population of over 115,000. From a total of 3,824 students in the participating schools whose ages are 3 to 21 years, 304 youngsters are handicapped and represent the full range of handicapping conditions.

Administrative Structure

An elementary school principal and a team of two arts resource supervisors acted respectively as Administrative Liaison and Master Teachers. Each person was located in a different school and communicated with each other through informal meetings and by telephone. Their services were in addition to regular responsibilities.

GREAT FALLS SCHOOLS - GREAT FALLS MONTANA

This site consisted of an interesting blend of seven public schools which included one special education center, a state school for the deaf and blind, and a private preschool for non-handicapped children. Located in an urban city of 70,000 in the foothills of western Montana, 165 teachers in the participating schools worked with 2,584 children, of which 383 were handicapped.

Administrative Structure

The Administrative Liaison was a music supervisor for the Great Falls Public Schools; the Master Teacher was a full time resource teacher for learning disabled children. The Master Teacher visited the schools each week to collect the activity evaluation forms and to provide assistance when needed. All time spent on the project was in addition to regular job responsibilities.

URSULINE SCHOOL OF MUSIC - LOUISVILLE, KENTUCKY

Two elementary Catholic schools servicing inner-city and suburban non-handicapped school children, and a learning center for mildly mentally handicapped and learning disabled students located within a Catholic school of Music were participants in the AIE project.

Administrative Structure

The director of the School of Music served as Administrative Liaison to the project investigator and communicator to participants from the other schools. A team from the School of Music consisting of a music, dance, and art educator acted as Master Teachers. The Arts for Learning Guide was integrated into the existing arts curriculum at the School of Music.

LOS ANGELES UNIFIED SCHOOL DISTRICT - LOS ANGELES, CALIFORNIA

Teachers from 16 special education centers and regular elementary schools within the Los Angeles Unified School District participated in the AIE project. The schools were spread throughout the entire Los Angeles School District.

Administrative Structure

The Administrative Liaison who is Coordinator of Staff Development and Instructional Planning for the Division of Special Education, recruited teachers representing most of the special education centers in the district and whose students included a wide range of handicapping conditions. The Master Teacher, a curriculum specialist, was charged with the task of providing assistance to the teachers as a part of her overall job responsibilities. The Arts for Learning Guide was used as a curriculum tool for inservice training of special education teachers.

LUMBERG ELEMENTARY SCHOOL - EDGEWATER, COLORADO

Nineteen of Lumberg's twenty-three teachers participated in the field testing of the Arts for Learning Guide. Located in the foothills of the Rockies, in Jefferson County, this school services 5 to 13-year old students who are handicapped, non-handicapped, and gifted. Some of the students, whose handicaps were emotional and behavioral disorders, and perceptual communication disabilities, were in self-contained classes and others were integrated into the regular classroom. The teachers included special, regular and arts educators in addition to resource teachers.

Administrative Structure

The Administrative Liaison was the building principal. The Master Teacher taught a class of gifted and talented fifth graders. The principal had been looking for a vehicle to integrate the arts into the existing curriculum and the Arts for Learning Guide became that tool.

INTERRELATED ARTS PROGRAM - MONTGOMERY COUNTY PUBLIC SCHOOLS, MARYLAND

The Interrelated Arts Program which offers inservice training to teachers in the arts provided overall coordination of the AIE project in Montgomery County whose student population is more than 107,430. Six schools, special education learning centers, regular elementary and high schools were included in this site.

Administrative Structure

The Coordinator of the Arts program also served as Administrative Liaison to the Project Investigator. The Master Teacher, an assistant to the Coordinator, work directly with the teachers in collecting data and forwarding it to the Project Investigator.

SARA'S CENTER - GREAT NECK, NEW YORK

This community arts center for the handicapped focuses on using the arts in developing living and learning skills. Located in a suburban community of 60,000 in Long Island, New York, more than 25 persons from ages 7 to 41 years, with physical, emotional, and developmental handicaps participated with the staff in utilizing the Arts for Learning Guide. The Guide was used as both an in-service training tool for the staff and as an activities guide for the center participants.

Administrative Structure

The Administrative Liaison and Master Teacher tasks were assumed by the Executive Director who communicated with the project investigator on an ongoing basis.

SEATTLE PUBLIC SCHOOLS - SEATTLE, WASHINGTON

Two regular elementary schools with students representing all handicapping conditions in this urban site participated in the AIE project. Some students were in self contained special education classes and other were integrated into the regular classroom.

Administrative Structure

The Arts Office of the Seattle Public Schools coordinated the project. The Administrative Liaison was an arts supervisor and the Master Teacher was an arts resource coordinator. Both persons worked closely with the Office of Special Education in coordinating the field testing effort.

SPEED DEVELOPMENTAL CENTER - CHICAGO HEIGHTS, ILLINOIS

This center provides special education services to students who come from 14 public school districts and whose handicapping conditions are retardation at the trainable, severe and profound levels. Two regular public elementary schools with non-handicapping students also participated. A second Speed Center for institutionalized severely and profoundly handicapped children, located a few blocks from the main building, participated with four classrooms of teachers and students.

Administrative Structure

The music teacher and supervisor acted as both Administrative Liaison and Master Teacher. These tasks were in addition to her regular responsibilities.

EDUCATIONAL SERVICE DISTRICT #101 - SPOKANE, WASHINGTON

Eight regular elementary schools and special education centers participated in the AIE project in this suburban valley of 79,000. Of the 3,810 children in the participating schools, 237 were handicapped.

Administrative Structure

An arts supervisor for an educational service district which provides services to teachers was the Administrative Liaison. If the project implementation project was successful, he was interested in using the Arts for Learning Guide as a tool in Staff Development. The master teacher was a classroom teacher who performed AIE tasks in addition to regular teaching responsibilities.

ST. LOUIS SPECIAL SCHOOL DISTRICT - ST. LOUIS, MISSOURI

The St. Louis Special School District included four schools with classes for the orthopedically handicapped and one children's hospital with classes for young in-patients.

Administrative Structure

As Administrative Liaison, the Assistant Superintendent of Services for the Orthopedically Handicapped and the Blind visited all participating teachers on a regular basis, collected data forms and communicated with the Project Investigators. The master teacher, a classroom teacher, provided assistance to teachers at her school.

ACTIVITIES AND ACCOMPLISHMENTS OVERVIEW

The major activities in Project AIE have been the development and refinement of a curriculum Model and Guide and the testing of its impact on the skill development of handicapped children.

The implementation strategies in this Section address the process by which the curriculum Model and Guide evolved. The Task Analysis/Workscope and Key Conferences, Site Visits, and Workshops Sections record within a given timeframe the steps taken to develop and test the Model and Guide.

IMPLEMENTATION STRATEGIES

YEAR ONE

1. To Develop an Arts Infused Education Curriculum Model for the Handicapped Child

The curriculum model evolved from the joint efforts of teachers, handicapped children, arts specialists, and administrators at Clover Park Schools in Tacoma, Washington.

During the initial phase of development, the teachers provided their students with arts awareness activities. The principal investigator worked in the various classrooms during this early phase. As the students and the teachers became more comfortable with arts activities, these were linked to the basic curriculum.

Four arts categories were identified - music, dance, drama and visual art. These were linked with an aesthetic developmental process consisting of five levels - awareness, imitation, self-initiation skill development and critical judgement. Each of these were interfaced with a particular basic skill.

The teachers were asked to infuse arts activities into group or individual lesson plans on a regular basis. Each teacher used each art form at least two times a week. Each arts activity usually lasted about ten to fifteen minutes. The teachers met regularly with the curriculum developer to discuss and exchange ideas and submit materials for the curriculum model.

The teachers submitted their basic curriculum goals to the arts task force and requested them to review the arts activities. The teachers preferred to identify a basic skills goal and to select an appropriate arts activity for their particular children.

A series of charts were devised to assist the teachers in identifying the curriculum concept, the behavioral objective and procedure for infusing arts activities. Putting their ideas down on paper proved somewhat difficult. Several of the teachers felt that an outline indicating the particular activity was adequate; others felt that detailed notes were needed.

VII. ACTIVITIES AND ACCOMPLISHMENTS

The result of these efforts was the final Arts for Learning Curriculum Model which used Valett's theoretical model as the underlying framework of reference for basic learning abilities.

Four arts categories - music, dance, drama and visual art - were linked with an aesthetic developmental process consisting of five levels: awareness, imitation, self-initiation, skill development and critical judgment. Both of these were interfaced with particular basic skills.

The final conceptual model (see Figure 1, page 2) may be interpreted as a structural guide to assist the teacher in selecting a specific art form (art, music, drama, movement) to enhance a basic learning ability (gross motor development, sensory or perceptual or social skills). Depending upon the students' level of development, any one or some combination of artistic levels (awareness, imitation, self-initiation, skill development, critical judgement) could be selected for emphasis.

2. To Developmentally Test the Curriculum Model with Special Education Children at One Pilot Site

The curriculum model was developmentally tested utilizing seven classrooms of special education students and their teachers from five elementary schools in the Clover Park School District, Tacoma, Washington.

The methods for selecting experimental and control groups and for collecting data are described in the Research Results and Evaluation Section of this report.

All of the experimental teachers attended a series of orientation workshops which were designed to introduce music, dance, drama, and visual arts. The sessions involved awareness building activities within the arts and identification of basic curriculum goals. These teacher infused arts activities into their daily lesson plans.

3. To Plan for a More Extensive Assessment of the Curriculum Model through Establishment of a Data Base

During the first year basic data was collected and compiled. The Peabody Individual Achievement Test was administered. Past academic records and teachers' observations were collected.

Teachers from the curriculum planning group were given an attitude and competency survey and a semantic differential test on a pre and post basis.

These data bases were used in the development of the Arts for Learning Guide and Conceptual Model prepared for year two of Project AIE. A description of the test, instruments and summary of the data is presented in the Research Results and Evaluation Section of this report.

IMPLEMENTATION STRATEGIES

YEAR TWO

1. To Test the Arts Infused Curriculum Model with Special Education Students at Three Geographically Different Sites.

Using the resources of the National Committee, Arts for the Handicapped Information Network, three sites representing the geographic spread of the entire country were chosen to field test the curriculum model developed during year one of the project. They were: Tacoma, Washington, in the Northwest, St. Louis, Missouri in the Midwest and New Haven, Connecticut in New England. In total, 392 students and 26 teachers from 3 sites participated in the project. The range of handicapping conditions and ages was increased. A description of participating teachers and students is included later in this section. Teachers experimented with an arts infused curriculum for a period of seven months of the school year.

2. To Modify and Refine the Arts Infused Curriculum Model and Arts for Learning Guide

A major focus of the second year of Project AIE was the refinement of The Arts for Learning Model and Guide. The conceptual model and the activities developed during the first year were collected into a working guide for teacher usage. The guide was organized in a framework of basic learning activities and levels of aesthetic development and categorized into each of the art forms. Each lesson presented an objective, procedure, materials, and suggestions for adaptations.

Because the children reflected a broad spectrum of handicapping conditions, and because they bridged the age group from 3.8 years to 20 years, each teacher used and/or developed individual or group lessons as he/she saw fit.

Each teacher was asked to keep a log of reactions to and suggestions for the Guide. At regular meetings held with the site coordinator, the teachers discussed these log entries, making recommendations toward the refinement of the curriculum. The site coordinator collected and organized all material. At the end of the school year, the teachers met as a group with the Principal Investigator to provide input for the Guide.

The methods for modifying and refining the Guide were different at each site. The Clover Park site coordinator drew upon her expertise in the visual arts and spent time in each classroom organizing art activities on a daily basis. She met with her team on a weekly basis and with the special education coordinator and project investigator periodically to assess the progress of the project.

At St. Louis, because the two schools were a great distance apart, group meetings were not held on a regular basis. The site coordinator, however, spent two half-days at each site per week meeting with each school's team. Her expertise as a visual arts and curriculum specialist enabled her to provide arts resource materials and experiences. The teachers were given college credit for their participation in the program.

At New Haven in the Celentano School, the entire team met each week for at least one hour to assess the program, make modifications, share ideas and determine future activities. There was daily contact between the site coordinator and her assistant, a music and special education specialist who was on site full time. The specialist held half-hour weekly conferences with each teacher to discuss logs and lesson refinements and revisions.

The Principal Investigator was responsible for directing and coordinating project implementation with the site coordinators. Periodic workshops and conferences were scheduled throughout the year to insure successful project development. The Principal Investigator supervised the collection of all student and teacher data. The organization and analysis of teacher logs formed the basis for the refinement of the Guide. Data was collected regarding the usefulness of the activities in teaching basic learning skills and promoting aesthetic growth. A summary of the teachers' evaluation of activities can be found in the Research and Evaluation Results Section.

3. To Collect and Analyze Data to Assess the Impact of an Arts infused Curriculum in the Education of Handicapped Children.

Statistical results of the first year compared an experimental group's academic and artistic gain with that of a control group. In the second year of this project, there were three experimental groups in three parts of the country. Each of these groups were pre and post-tested using the PIAT for academic achievement and were continuously evaluated using observational techniques for artistic improvement. Parents were included in the project this year and completed a checklist indicating their perceptions of artistic growth.

in their children. Teachers also completed this checklist in addition to an arts survey form which revealed their interest, comfort and experience in the arts. A detailed report of the data collection and results are included in the Research Results and Evaluation Section.

IMPLEMENTATION STRATEGIES

YEAR THREE

1. To Field Test the Curriculum Model at 14 Geographically Different Sites.

Using the resources of The National Committee, Arts for the Handicapped, 14 sites representing the geographic spread of the entire country were chosen. Special, arts, and regular education teachers were included. Students from ages 3 to 21 years with physical and sensory disabilities, moderate to severe mental defects, emotional and behavior disorders were involved. Non-handicapped children also participated. A description of teachers and students is included in the Research and Evaluation section of this report.

At each field test site, a master teacher with background in both arts and special education was chosen to serve as support to teachers. An administrator was selected to act as liaison between site participants, project investigator and significant school administrators. The project investigator visited each site during the project year. She observed teachers, conducted informal interviews with them and met with the administrative liaison. Continuous telephone and mail contact was maintained throughout the duration of the project. A sample site visit report form can be found in the Appendix.

Participants completed questionnaires regarding their interest, comfort, and experience with the arts and their education and training at the beginning of the project. They completed activity evaluation forms and submitted them weekly to the project investigator. Teachers were encouraged to record lesson adaptations or extensions and to submit these and any additional comments with their weekly evaluation forms. The results of the activity evaluations can be found in the Research and Evaluation section of this report.

Workshops in the arts and special education were offered at each site. NCAH provided an arts resource leader to conduct these workshops based on the individual needs of each site. The overall goal of the workshop was to provide in-service training for teachers in using arts strategies to teach basic learning skills and aesthetic development to handicapped children. A description and evaluation of these workshops is included in the Research and Evaluation Results section of the report. A sample agenda and Arts for Learning Workshop Invitation is in the Appendix.

2. To Invite Critical Appraisal of the Curriculum Model by Arts and Special Education Personnel

The National Committee, Arts for the Handicapped identified a number of universities with departments of special education and/or the arts where faculty have a particular interest and expertise in arts for the handicapped. Each of these were asked to make a critical appraisal of the curriculum model by recording their comments in a uniform way for purposes of retrieval and analysis using an evaluation instrument developed for this purpose. These professionals were asked to evaluate the Arts for Learning Guide according to its format and content, and on the importance of arts activities as agents of change/improvement in basic learning abilities.

In addition, at each of the field test sites, teachers and administrative liaison personnel were asked to appraise the curriculum model using an evaluation instrument. The questionnaire addressed the format and content of the Guide and its effectiveness in improving basic learning abilities and aesthetic development. Master teachers and administrative liaisons also evaluated the Guide during a seminar they attended as part of the NCAH National Annual meeting in June of 1979. A report of this seminar is included in the Appendix.

A detailed description of these instruments and the results of the evaluation are included in the Research and Evaluation Results section.

3. To Plan and Implement National Dissemination Strategies

The administrative liaison personnel and master teachers were invited to participate in the NCAH National Annual Meeting in June 1979. During that time, a small studies seminar was conducted at which participants considered strategies for national dissemination.

Project staff made presentations and exhibits at conferences and conventions of professional organizations of arts educators, special educators and educational administrators. A list of key conferences can be found in this section. The Arts for Learning Guide and Project was described in NCAH newsletters and publications. In addition, various trade publications described the project and its activities. These publications are included in the Appendix.

TASK ANALYSIS WORKSCOPE

TASKS (OBJECTIVES AND SUB-OBJECTIVES)	PERSONNEL	SCHEDULED COMPLETION DATE	STATUS
1. Complete the development of an arts infused curriculum for the handicapped.			
1.1 Assemble personnel including specialists in arts education, in special education and in curriculum design.	Project Director	October, 1976	Completed
1.2 Conduct meetings with personnel to review and refine the scope of the project.	Project Director	September 15 - December 15, 1976	Completed
1.3 Collect reference materials from library sources, conduct computer search, survey existing materials.	Curriculum Dev. Group & Pilot Site Task Force	On-going	Completed
1.4 Prepare a rationale statement for Arts Education for the Handicapped	Principal Investigator, Curriculum Dev. Group & Task Force		Completed October 15, 1976
1.5 Add written curriculum material to the existing material.	Principal Investigator, Curriculum Dev. Group & Task Force	On-going	Completed
1.6 Revise and refine the curriculum	Principal Investigator, Curriculum Dev. Group & Task Force, National Ad. Comm.	August, 1977	Completed

TASK ANALYSIS WORKSCOPE

TASKS (OBJECTIVES AND SUB-OBJECTIVES)	PERSONNEL	SCHEDULED COMPLETION DATE	STATUS
1.7 Prepare year-end report.	Principal Investigator, Curriculum Dev. Group & Task Force, National Ad. Comm., Project Director	August, 1977	Completed December 7, 1977
2. Pilot Test an Arts Infused Curriculum for the Handicapped in terms of its effect on the cognitive development of handicapped children.			
2.1 Select a pilot test site.	Project Director	October 1, 1976	Completed
2.2 Assemble a pilot test site.	Project Director	October 26, 1976	Completed
2.3 Select a research sample, using random assignment of 5 classrooms for the experimental group and a minimum of 5 classrooms for the control group.	Admin. Co-ordinator, Principal Investigator	December 6, 1976	Completed
2.4 Collect pre-test data on attitudes and backgrounds of the teachers.	Admin. Co-ordinator, Principal Investigator	January 3-7, 1977	Completed
2.5 Collect pre-test data on student achievement using the PIAT.	Admin. Co-ordinator, Principal Investigator, Test Consultant	January 3-7, 1977	Completed

YEAR ONE

TASK ANALYSIS WORKSCOPE

TASKS (OBJECTIVES AND SUB-OBJECTIVES)	PERSONNEL	SCHEDULED COMPLETION DATE	STATUS
2.6 Collect demographic data on all research subjects.	Admin. Co-ordinator, Principal Investigator	January 3-7, 1977	Completed
2.7 Conduct meetings of teachers with the task force.	Admin. Co-ordinator, Principal Investigator	January 3-7, 1977 On-going	Completed
2.8 Begin treatment of the experimental group with the arts infused curriculum.	Curriculum Dev. Group	January-June, 1977 On-going	Completed
2.9 End treatment of the experimental group with the arts infused curriculum.	Curriculum Dev. Group	June, 1977	Completed
2.10 Collect post-test data on attitudes of the teachers.	Principal Investigator, Admin. Co-ordinator	June, 1977	Completed
2.11 Collect post-test data on student achievement using the PIAT	Principal Investigator, Admin. Co-ordinator, Test Consultants	June, 1977	Completed
2.12 Analysis of the results.	Third Party Evaluator	July, 1977	Completed
2.13 Interpret the results.	Third Party Evaluator	July, 1977	Completed

YEAR ONE

TASK ANALYSIS WORKSCOPE

TASKS (OBJECTIVES AND SUB-OBJECTIVES)	PERSONNEL	SCHEDULED COMPLETION DATE	STATUS
2.14 Prepare a report of the research.	Project Director, Pilot Site Staff	August, 1977	Completed.

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TASK ANALYSIS WORKSCOPESCHEDULED
COMPLETION
DATE

STATUS

TASKS (OBJECTIVES AND SUB-OBJECTIVES)

PERSONNEL

1. Testing the curriculum model with special education students at three geographically different sites

1.1 Assemble planning and implementation group to review and clarify project design and strategy

Project Director September, 1977 Completed

1.2 Select Principal Investigator

Project Director September, 1977 Completed

1.3 Select three sites

Project Director September, 1977 Completed
Principal Investigator

1.4 Interview at each site for a site coordinator and administrative team

Project Director September, 1977 Completed
Principal Investigator

1.5 Conduct orientation meetings at each site with administrators and coordinators

Project Director October, 1977 Completed
Principal Investigator

1.6 Conduct meetings at each site with all teachers who will be involved in the project

Site Coordinator October, 1977 Completed

1.7 Conduct meeting of Key Planning and Implementation Group members with Site Personnel, including Coordinators and Administrators from all four sites to finalize implementation strategies, clarify project goals and objectives

Project Director/ October 15, 1977 Completed
Principal Investigator

1.8 Site Coordinator prepares written interim report for Principal Investigator

Site Coordinator November 15, 1977 Combined with continuation request of February 1978

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TASK ANALYSIS WORKSCOPESCHEDULED
COMPLETION

TASKS (OBJECTIVES AND SUB-OBJECTIVES)	PERSONNEL	DATE	STATUS
1.9 Project Director prepares written interim report for BEH Project officer	Project Director	December 15, 1977	Combined with continuation request of February 1978
1.10 Site staff hold final meetings to evaluate the project	Site Coordinator Administrative Team	June, 1978	Completed
1.11 All Site Coordinators meet with Principal Investigator to develop final report for Project Director	Principal Investigator, Site Coordinators	June 15, 1978	Completed
1.12 Project Director prepares and submits year end report to BEH Project Officer	Project Director	August, 1977	Continuation request submitted February 1978
II. Modifying and refining an arts in education curriculum for the handicapped			
2.1 Conduct meetings with all personnel at each site to review development of curriculum model and answer questions regarding its use, the requirements for keeping a log of suggestions for modification and anticipated outcome of the project	Principal Investigator	September-October, 1977	Completed
2.2 Conduct meetings with the curriculum validation team individually and in group to review progress	Site Coordinators	October, 1977- May, 1978	Completed

YEAR TWO

TASK ANALYSIS WORKSCOPE

SCHEDULED
COMPLETION

TASKS (OBJECTIVES AND SUB-OBJECTIVES)	PERSONNEL	DATE	STATUS
2.3 Collect and analyze log books	Principal Investigator, Site Coordinators	November, 1977- May, 1978	Completed
2.4 Conduct meetings with Site Coordinators and curriculum validation team to offer new ideas, innovative materials usage, and information	Principal Investigator, Site Coordinators	November, 1977- May, 1978	Completed
2.5 Conduct final meeting with curriculum validation team to review suggestions for refinement and modification of the curriculum model and prepare materials for final report	Site Coordinators	June, 1978	Completed
2.6 Complete preparation of refined curriculum model	Principal Investigator, Project Director, Site Coordinators, Planning & Implementation Group	July, 1978	Completed

III. Collecting and analyzing data that will assess the impact of an arts in education for the handicapped curriculum model

3.1 Identify the teachers and special education students who will participate in this project	Site Coordinators, Administrative Team	October, 1977	Completed
3.2 Collect demographic data on all research subjects	Site Coordinators Data Consultants	October, 1977	Completed

TASK ANALYSIS WORKSCOPE

TASKS (OBJECTIVES AND SUB-OBJECTIVES)	PERSONNEL	SCHEDULED COMPLETION DATE	STATUS
3.3 Collect pre-test data on attitudes and competencies of the teachers	Site Coordinators	October, 1977	Completed
3.4 Collect pre-test data on student achievement using the PIAT	Data Consultants	October, 1977	Completed
3.5 Begin treatment of the research group with the arts-infused curriculum	Curriculum Validation Group	October-November, 1977	Completed
3.6 End treatment of the research group with the arts-infused curriculum	Curriculum Validation Group	May-June, 1978	Completed
3.7 Collect post-test data on attitudes and competencies of the teachers	Site Coordinators	May-June, 1978	Completed
3.8 Collect post-test data on student achievement using the PIAT	Data Consultants	May-June, 1978	Completed
3.9 Analysis of the results	Third Party Evaluator	July, 1978	Completed
3.10 Interpret the results	Third Party Evaluator	August, 1978	Completed
3.11 Prepare a report of the completed research	Third Party Evaluator	August, 1978	September, 1978

YEAR THREE

TASK ANALYSIS WORKSCOPE

TASKS (OBJECTIVES AND SUB-OBJECTIVES)	PERSONNEL	SCHEDULED COMPLETION DATE	STATUS
I. To field test the curriculum model at twelve geographically different sites			
1.1 Assemble advisory group to review and clarify project design and strategy	Project Director	September, 1978	Completed
1.2 Select Principal Investigator	Project Director	September, 1978	Completed
1.3 Select twelve field test sites	Project Director Principal Investigator	September, 1978	Completed/ Increased to 14 sites
1.4 Interview at each site for Master Teacher and Administrative Liaison Person	Project Director Principal Investigator	September, 1978	December, 1978
1.5 Conduct orientation meetings at each sites with project personnel	Principal Investigator	October, 1978	January, 1979
1.6 Conduct orientation meetings at each site with all teachers who will be involved in the project.	Master Teacher	October, 1978- May, 1979	January-February, 1979
1.7 Develop data collection instruments for teacher evaluation of the impact of the curriculum	Data Collection Consultant	September, 1978	Completed
1.8 Develop data collection instruments for parent evaluation of the impact of the curriculum	Data Collection Consultant	September, 1978	No formal collection
1.9 Visit each field test site twice to provide direction, guidance and encouragement to project personnel	Principal Investigator	January - June, 1979	Completed

TASK ANALYSIS WORKSCOPE

TASKS (OBJECTIVES AND SUB-OBJECTIVES)	PERSONNEL	SCHEDULED COMPLETION DATE	STATUS
1.10 Prepare interim report for project director	Principal Investigator	December, 1978	Included in final report
1.11 Collect completed evaluation instruments	Master Teacher	June, 1979	Completed
1.12 Analyze collected data and prepare report	Third Party Evaluator	June, 1979	Completed
1.13 Conduct final meetings with project personnel	Project Director Principal Investigator	June, 1979	Completed
1.14 Prepare a final report of the field testing	Project Director Principal Investigator	August, 1979	December, 1979
II. To invite critical appraisal of the curriculum model by arts and special education curriculum specialists			
2.1 Contact ten faculty members (five in arts education, five in special education), who have already been identified as having a particular interest and expertise in arts for the handicapped, to form a review team	Project Director	September, 1978	June, 1979
2.2 Develop response format for the recording of a critical appraisal	Data Collection Consultant	September, 1978	December, 1978
2.3 Contact curriculum specialists in each of the cooperating school districts to review and appraise the curriculum model	Project Director	September, 1978	Completed by Administrative Liaison & Field Test Teachers June, 1979

YEAR THREE

TASK ANALYSIS WORKSCOPE

TASKS (OBJECTIVES AND SUB-OBJECTIVES)	PERSONNEL	SCHEDULED COMPLETION DATE	STATUS
2.4 Collect the evaluation instrument from all review team members	Project Director	December, 1978	June, 1979
2.5 Analyze the collected data and prepare a report	Third Party Evaluator	January- June, 1979	June, 1979
III. To plan and implement national dissemination strategies			
3.1 Convene the National Advisory Committee to plan strategies for the national dissemination of the Arts in Education Guide	Project Director	November, 1978	Completed Annual Meeting-Small Studies Seminar June, 1979
3.2 Prepare announcements of the availability of the Arts in Education Curriculum Guide for the Handicapped for publication	Project Director	October, 1978	January- October, 1979
3.3 Contact a least five of the professional organizations of arts educators for opportunities to present the slide/tape presentation on AIE	Project Director Principal Investigator	September, 1978	January- July, 1979

KEY MEETINGS AND CONFERENCES

YEAR ONE

WHEN	WHERE	WHO	PURPOSE	COMMENTS
9/17/76	Washington, D.C.	Project Director/ Third Party Evalua- tor.	Review program design.	
10/1/76	Tacoma, Washington	Project Director	Evaluate potential pilot test site fac- ilities, staff and resources.	As a result of this visit, Clover Park School Dist. is se- lected as first year pilot site.
10/26/76	Washington, D.C.	Key Advisory Pers- sonnel for AIE Pro- ject.	Detail plans for pro- ject implementation.	
12/3/76	Tacoma, Washington	Project Director/NCAH Curriculum Consultant	Review preliminary work- scope with pilot site task force and finalize project strategies. Or- ientation dates set for 1/6 and 1/7/77.	
12/8/76	Clover Park Schools	Students (control and experimental)	Testing of children begins.	Two testors are selected by the Assistant Adminis- trator for Pupil Services.
12/8 thru 12/22/76	Clover Park Schools	Students (control and experimental)	All children are test- ed with PIAT, atti- tude tests, learning style inventory, and semantic differential test.	

KEY MEETINGS AND CONFERENCES

YEAR TWO

WHEN	WHERE	WHO	PURPOSE	COMMENTS
11/4/77	Litzinger School	Administrative team, Validation team, Test- ing personnel	Orientation, planning and implementation	
11/9/77	Ackerman School	Administrative team, Validation team, Test- ing personnel	Orientation, planning and implementation	
11/11/77	Park School	AIE Project Investiga- tor, CEMREL Project staff, Validation team from Park Westview Schools	Indepth program devel- opment workshop for members of experimen- tal and validation team	Workshop consisted of music, visual art, drama, movement
11/12/77	CEMREL	All Project associated personnel, Project In- vestigator	Intro-workshop	
1/25/78	CEMREL	Administrative team, Validation team	Movement workshop by Dance Therapist	Well received
2/11/78	CEMREL	Administrative team, Validation team	Arts workshop by Arts Education Therapist and Movement/Drama persons	Highly successful
2/24/78	CEMREL	Project Investigator	Demonstration of shadow puppets, rec. for sequencing of curriculum guide	

KEY MEETINGS AND CONFERENCES

YEAR ONE

WHEN	WHERE	WHO	PURPOSE	COMMENTS
12/22/76	Portland, Oregon	Third Party Evaluator/Pilot Site Coordinator	Complete research design for pilot test of curriculum.	
1/4/77	Pupil Services Clover Park, Wa.	Task Force	To include an additional attitude test for all teachers who plan to participate	Semantic Differential Test is selected
1/4 thru 1/21/77	Clover Park Schools	Students/team members	Testing completed	Attitude tests, learning style inventory, & semantic differential test
1/4 thru 1/21/77	Clover Park Schools	Principal Investigator/curriculum development team	Visitation of classrooms and half day per week critiques with team members	
2/10/77	Conference Center, Dupont, Washington	Principal Investigator/curriculum development team	An in-depth look at how to write objectives for an arts infused curriculum	Each agrees to include the goals, objectives, procedures, degree of mastery achieved and significant personal comments. All agree they are now using arts at least once a day to teach a basic skill; several are now using it twice a day. This meeting

KEY MEETINGS AND CONFERENCES

YEAR ONE

WHEN	WHERE	WHO	PURPOSE	COMMENTS
				(Cont.) was most productive.
2/24/77	Parkway School	Music Specialist/ team members/ Principal Investigator	To provide additional music background for curriculum development team.	The team members now feel that they have had sufficient orientation and are more eager to discuss specific arts infusion ideas.
3/28/77	Clover Park Schools	Planning & Implementation Coordinator	Collect basic skills lesson plans.	
6/66thru 6/16/77	Clover Park Schools	Team members/Students (control & experimental)	Post-testing at individual schools.	

KEY MEETINGS AND CONFERENCES

YEAR TWO

WHEN	WHERE	WHO	PURPOSE	COMMENTS
2/24/78	CEMREL	Project Investigator	Workshop	
3/10/78	Park School	Validation Team	Music Workshop	Well executed program
3/15/78	Westview	Administration team, Validation team	Clay Demonstration workshop	
4/5/78	CEMREL	All Project staff	Workshop on creative dramatics	
4/26/78	CEMREL	All Project staff	How to use new art materials; viewing new slides	
5/3/78	CEMREL	Administrative team, Validation team	Schedule for remainder of program; participa- tion in future programs	
5/22/78	CEMREL	All Project staff	Rec. for curriculum guide; develop wish list for future	Listed guide changes
10/25/77	Celentano School	Administrative team members	Start-up of project testing	
11/16/77	Celentano School	Administrative Direc- tor, Site Coordinator, Assistant Site Coordi- nator, Principal Spe- cial Education Super- visor	Outline program imple- mentation	

KEY CONFERENCES

YEAR THREE

WHEN	WHERE	WHO	PURPOSE	COMMENTS
12/15/78	San Antonio, TX Council for Excep- tional Children/ Teacher Development Division Conference	Project Consultant	Present AIE slide tape and distribute Arts for Learning cards	
1/31/79	Ramada Inn, Old Town, Alexandria	Project Director/ Project Investigator All field site Adminis- trative liaison and master teachers	Orientation meeting to provide participants with background on project and expecta- tions and procedures	Videotape on how the arts can develop social, emotional and academic skills of handicapped children
3/15/79	American Association for Music Therapy Conference Philadelphia, PA	Project Consultant	Staff exhibit of SIE materials	
4/21/79	Spina Bifida Asso- ciation Conference Washington, DC	Project Investigator	Slide presentation on AIE project and dis- tribution of materials	This conference was primarily attended by parents. They gave feedback into parental involvement in arts programs.
4/25 thru 4/27/79	Council for Excep- tional Children Conference Dallas, TX	Project Director/ Project Investigator	Staff exhibit booth with AIE materials; presentation entitled "Developing a Guide for Infusing the Arts into the Education of Handi- capped Children"	Question and answer period followed presentation

KEY CONFERENCES

YEAR THREE

WHEN	WHERE	WHO	PURPOSE	COMMENTS
6/26/79	NCAH Annual Meeting, Kennedy Center for the Performing Arts, Washington, DC	NCAH Staff, AIE Project Director and Investigator, NCAH Project Coordinators	Slide presentation on AIE Project	This presentation was made to all participants at the Annual Meeting
6/27 thru 6/28/79	Small Studies Seminar, NCAH Annual Meeting, Ramada Inn, Olde Town, Alexandria	Project Investigators Field Site Administrative Liaison Personnel	Examine form and content of Arts for Learning Guide, suggest national Dissemination strategies and administrative implementation models	Participants unanimously agreed on need for in-service training to accompany Arts for Learning Guide
6/29 thru 7/2/79	American Association of School Administrators, Denver, CO	Project Investigator	Staff exhibit on AIE project, slide presentation on project at curriculum briefing session	

FIELD SITE VISITS

YEAR THREE

WHEN	WHERE	WHO	PURPOSE	COMMENTS
3/13/79	Celantano School New Haven, CT	Project Investigator, Admin. Liaison Personnel Master Teacher, Field Test Teachers	Monitor, provide directions, guidance and encouragement to project personnel	Second year involvement in project, positive response to Guide. Teachers have initiative and experience with activities
3/14/79	Montgomery County Public Schools, Interrelated Arts Program	Project Investigator, Admin. Liaison Personnel Master Teacher, Field Test Teachers	Monitor, provide directions, guidance and encouragement to project personnel	Montgomery County teachers have many innovative projects such as this one. Interest not very high.
3/20/79	Chantangua County Board of Cooperative Educational Services, Chantanqua, NY	Project Investigator, Admin. Liaison Personnel Master Teacher, Field Test Teachers	Monitor, provide directions, guidance and encouragement to project personnel	Lively energetic faculty. Late project due to administrative problems of Master Teacher
3/21/79	Sara's Center Great Neck, NY	Project Investigator, Admin. Liaison Personnel Master Teacher, Field Test Teachers	Monitor, provide directions, guidance and encouragement to project personnel	Guide being used with Center participants and also as in-service tool to develop skills. Guide helps in structuring activities
3/28/79	Louisville, KY Ursuline School of Music	Project Investigator, Admin. Liaison Personnel Master Teacher, Field Test Teachers	Monitor, provide directions, guidance and encouragement to project personnel	Guide being used with inner city "disadvantaged" students in Catholic School
3/29/79	St. Louis Special School District St. Louis, MO	Project Investigator, Admin. Liaison Personnel Master Teacher, Field Test Teachers	Monitor, provide directions, guidance and encouragement to project personnel	Enthusiasm high. Second year teachers like Guide

FIELD SITE VISITS

YEAR THREE

WHEN	WHERE	WHO	PURPOSE	COMMENTS
3/30/79	SPEED Developmental Center Chicago Heights, IL	Project Investigator	Monitor, provide directions, guidance and encouragement to project personnel	Band wagon effect of teachers wanting to get involved, good. Project coordination. Teachers of severely and profoundly handicapped students are recording lesson adaptations
4/13/79	Lumberg Elementary School, Edgewater, CO	Project Investigator	Monitor, provide directions, guidance and encouragement to project personnel	19 out of 23 teachers are participating. Solid support, high level of sophistication in arts infusion
4/14/79	Los Angeles Unified School District Los Angeles, CA	Project Investigator	Monitor, provide directions, guidance and encouragement to project personnel	Teachers spread out over entire district so little peer support evident. Teachers paid to attend workshop
4/17/79	Great Falls Schools Great Falls, MT	Project Investigator	Monitor, provide directions, guidance and encouragement to project personnel	Very diverse group of students. High interest but little experience with infusing arts
4/26/79	Arlington Schools Arlington, TX	Project Investigator	Monitor, provide directions, guidance and encouragement to project personnel	Teachers are working with more severely handicapped students than in the past. They are interested in learning ways to use the arts to adapt teaching techniques

FIELD SITE VISITS

YEAR THREE

WHEN	WHERE	WHO	PURPOSE	COMMENTS
4/16/79	Spokane, WA Educational Service Service District #101	NCAH Associate Director	Monitor, provide direction, guidance and encouragement to project personnel	Teachers gave demonstration of use of arts in classroom. Interest and excitement within school high. Questions about follow up
4/17/79	Seattle Public Schools, Seattle, WA	NCAH Associate Director	Monitor, provide direction, guidance and encouragement to project personnel	Teachers lack understanding of purpose of curriculum; complaints about time as factor is keeping them from using activities more frequently
4/18/79	Clover Park Schools Tacoma, WA	NCAH Associate Director	Monitor, provide direction, guidance and encouragement to project personnel	Highly enthusiastic. Excellent use of community resources

ARTS FOR LEARNING WORKSHOPS

YEAR THREE

WHEN	WHERE	WHO	PURPOSE	COMMENTS
5/6/79	SPEED Developmental Center	Arts Resource Leader, Admin. Liaison/ Master Teacher, Field Site Teachers	Provide in-service training in using arts to develop basic skills	See Page 214 for summary and evaluation of workshops by Third Party Evaluator
5/7/79	Spokane WA Educational Service District #101	Arts Resource Leader, Project Investigator, Admin. Liaison, Master Teacher, AIE Field Site Teachers	Provide in-service training in using arts to develop basic skills	See Page 214 for summary and evaluation of workshops by Third Party Evaluator
5/9/79	Arlington Schools Arlington, TX	Arts Resource Leader, Admin. Liaison, Master Teacher, AIE Field Site Teachers	Provide in-service training in using arts to develop basic skills	See Page 214 for summary and evaluation of workshops by Third Party Evaluator
5/10/79	Clover Park Schools Tacoma, WA	Arts Resource Leader, Admin. Liaison, Master Teacher, AIE Field Site Teachers	Provide in-service training in using arts to develop basic skills	See Page 214 for summary and evaluation of workshops by Third Party Evaluator
5/11/79	Chautauqua Board of Cooperative Educational Services, Chautauqua, NY	Arts Resource Leader, Admin. Liaison/Master Teacher, AIE Field Site Teachers	Provide in-service training in using arts to develop basic skills	See Page 214 for summary and evaluation of workshops by Third Party Evaluator
5/17/79	St. Louis Special School District St. Louis, MO	Arts Resource Leader, Project Investigator, Admin. Liaison, Master Teacher, AIE Field Site Teachers	Provide in-service training in using arts to develop basic skills	See Page 214 for summary and evaluation of workshops by Third Party Evaluator

ARTS FOR LEARNING WORKSHOPS

YEAR THREE

WHEN	WHERE	WHO	PURPOSE	COMMENTS
5/22/79	Celantano School New Haven, CT	Arts Resource Leader, Admin. Liaison/Master Teacher, AIE Field Site Teachers	Provide in-service training in using arts to develop basic skills	See Page 214 for summary and evalua- tion of workshops by Third Party Evaluator
6/7/79	Sara's Center Great Neck, NY	Arts Resource Leader, Project Investigator, Admin. Liaison/Master Teacher, Field Site Teachers, Center Clients	Provide in-service training in using arts to develop basic skills	See Page 214 for summary and evalua- tion of workshops by Third Party Evaluator
6/20/79	Seattle Public Schools, Seattle, WA.	Arts Resource Leader, Admin. Liaison, Master Teacher, Field Site Teachers	Provide in-service training in using arts to develop basic skills	See Page 214 for summary and evalua- tion of workshops by Third Party Evaluator
10/18/79	Great Falls Schools Great Falls, MT	Arts Resource Leader, Admin. Liaison, Master Teacher Field Site Teachers	Provide in-service training in using arts to develop basic skills	See Page 214 for summary and evalua- tion of workshops by Third Party Evaluator

VIII. RESEARCH AND EVALUATION RESULTS

RESEARCH AND EVALUATION DESIGN AND PROCEDURES

OVERVIEW

The major focus of this research project was the investigation of the hypothesis that academic achievement of handicapped students is positively and significantly related to the addition of an arts infused curriculum model in the classroom. The basic design utilized in this study was the classic experimental type. Pre and post testing was used to collect data on randomly selected special education students and their teachers. The Peabody Individual Achievement Test was selected to measure academic gains. Statistical results of the first and second years compare the experimental group's academic gains with that of a control group of children.

During the project's first year, fourteen teachers and 140 students from the Clover Park School District in Tacoma, Washington participated. This pilot study intervention period encompassed a time span of approximately six months. In the project's second year, 26 teachers and 392 students from classes in Clover Park Schools, Washington, St. Louis Special School District, Missouri, and Celantano School in New Haven, Connecticut, participated. Data were collected based on an intervention period of 7 months. In the third year of the project, 189 teachers and 3,554 students from 14 school districts participated for a six month period.

Student data which measured the effect of an arts infused curriculum on the cognitive development were collected during the first two years of the project. In addition, information was collected from teachers that measured their attitude towards the arts and their comfort in utilizing the arts in the classroom. A teacher and parent checklist which measured artistic growth in children was administered the second year only.

During the first year of this project, arts activities to teach basic skills were developed, collected and compiled utilizing a three dimensional conceptual framework. During the second year, the Arts for Learning Guide and Model was revised and refined; new activities were added. Data were collected to determine the usefulness of these activities in teaching basic learning skills and promoting aesthetic growth.

During the third year of the Arts in Education project, an extensive national field test of the Arts for Learning Model and Guide was undertaken. The curriculum model was utilized at 14 geographically different field test sites serving children with all handicapping conditions. Critical appraisal of the curriculum model by arts and special education university personnel was invited. The perceptions of administrators on the efficacy of the model were elicited and analyzed. Data on the utility of specific activities in the Guide were collected. In addition, Arts for Learning Workshops were offered at each site. Their effectiveness in meeting stated goals was evaluated. Finally, the overall administration of the third year of Project AIE was evaluated by Administrative Liaison personnel and Master Teachers.

The research and evaluation instruments used throughout the three years of this project are described in the following section. Results are presented by project year.

RESEARCH AND EVALUATION

INSTRUMENTS

Standardized instruments as well as specially developed measurement instruments were used during the three years of Project AIE. A summary of the instruments and an explanation of their use is provided. A more detailed description follows.

THE PEABODY INDIVIDUAL ACHIEVEMENT TEST is a sensitive standardized instrument that lends itself especially well for use with handicapped students. It was administered to every student in the Project as a pre/post test.

THE TEACHER COMPETENCY INVENTORY/ARTS SURVEY FORM was produced for Project AIE by a private contractor to reveal the arts background of the teachers participating in the Project and their interest, comfort, and ability in the arts. The major focus was to reveal training needs to increase those arts skills which were weak.

THE SEMANTIC DIFFERENTIAL offers the means for quantitatively measuring differences of expression of connotative meaning. Subjects were asked to indicate the direction of their association and its intensity on a seven step scale. Descriptors were developed for Project AIE which measured teacher's attitudes and skills in the arts.

CHECKLIST FOR PARENTS AND TEACHERS: ARTISTIC GROWTH IN CHILDREN was administered to teachers and parents to enable the researchers to document teacher's and parent's perceptions of student's progress throughout the course of the Project. The checklist provided 29 dependent variables for analysis.

THE ARTS FOR LEARNING GUIDE AND MODEL EVALUATION FORM FOR TEACHERS was administered to participating teachers to gauge the effectiveness of the Guide in improving learning abilities and aesthetic growth. They were asked to evaluate format and content.

THE ARTS FOR LEARNING GUIDE AND MODEL EVALUATION FOR ADMINISTRATORS was developed for administrators to evaluate their perceptions of basic teacher involvement, level of aesthetic involvement of teachers and the administrators' perceptions of the Guide itself.

THE ARTS FOR LEARNING ACTIVITY EVALUATION FORM was completed by project teachers to collect information on the utility of specific activities. They checked each statement with which they agreed and were encouraged to include comments and lesson adaptations.

THE LEADERSHIP EVALUATION OF THE ARTS FOR LEARNING MODEL AND GUIDE was administered to participating teachers to gauge the effectiveness of the Guide in improving learning abilities and aesthetic growth. They were asked to evaluate format and content.

RESEARCH AND EVALUATION INSTRUMENTS

INDIVIDUAL DESCRIPTIONS

PEABODY INDIVIDUALIZED ACHIEVEMENT TEST (PIAT)

Purpose. The purpose of the PIAT is to provide a wide-range screening measure of achievement in the areas of mathematics, reading, spelling and general information. When an overview of the scholastic attainment of a person is needed, PIAT scores will be directly useful. Where a more intensive study of an individual is required, these results can assist the examiner in selecting the appropriate diagnostic instrument(s) for a particular subject matter or the more precise measure at a particular level of achievement. It is an individually-administered instrument for use by a variety of professional persons working in a variety of settings - including schools, institutions, industry and community agencies - who need to screen for the general level of school achievement of children, adolescents or adults.

Major Characteristics. The test has a number of properties designed to enhance its utility as a measure of scholastic attainment.

1. The PIAT was designed as an individually-administered test. Over the years, the measurement of scholastic attainment has moved dramatically from early subjective-type measures toward more sophisticated and carefully-constructed examinations, the epitome of which is the standardized test. However, to the best of the authors' knowledge, all such achievement instruments - with the one exception (Jastak and Jastak, 1965) - have been group tests, with each form or level either a measure of a relatively narrow range of grades at most or diagnostic instruments in a specific subject-matter area, such as reading or mathematics. The individually-administered instruments have certain advantages over group administered ones. With individual tests, one can measure the achievement of quite immature, as well as handicapped subjects, such as the cerebral palsied, who would be severely disadvantaged, if not untestable, on the usual group measures.

2. The PIAT is a wide-range instrument extending from kindergarten through high school, with the items arranged in order of difficulty. Some of the major faults of group tests are avoided: boring brighter subjects with items which are too easy for them, frustrating slower ones with items beyond their abilities and, at the same time, failing to provide a ceiling for advanced students or a basal for subjects who are young, immature or have learning disabilities.

3. The PIAT is an untimed, power test. A premium on speed would have been a handicap for many of the types of individuals most likely to be referred for evaluation - the underachieving, the disadvantaged, the handicapped.

4. The test items were balanced across traditional, modern and functional aspects of the available curricula so as to minimize bias resulting from the particular instructional approach to which the subject had been exposed, such as "new" versus "old" mathematics. To the extent possible, the PIAT test items measure functional knowledge or abilities that are widely-expected educational outcomes, rather than specific techniques or concepts, likely to develop under one curriculum approach as opposed to others. The final items were selected because of empirical evidence about their appropriate difficulty level and ability to discriminate between good and poor students, rather than because of their ability to tap a critical theoretical stage in the acquisition of knowledge.

5. The PIAT was constructed so as to be most sensitive at the lower levels and to decrease gradually in sensitivity with advancing grade levels. Furthermore, sensitivity at the kindergarten level was elected because of the need for an achievement test at this level, a level where the usual group achievement tests are of no use.

6. Demonstration and Training Exercises were designed to introduce each of the subtests so as to be able to test very young and immature subjects. These exercises are used to teach the subject the type of response expected. They should insure some success experiences for nearly all subjects.

7. Completely objective scoring, which is easily accomplished while the test is being administered, is built into three of the five subtests which are in multiple-choice format and precise standards are provided on the other two to reduce scoring variability.

8. The subject needs to make only a pointing response to signal his answer on more-than-half of the items that are multiple-choice in nature. Even this performance can be eliminated for the cerebral palsied and other handicapped persons by the examiner pointing to each of the four choices in turn and having the subject signal a "yes" or "no" with a nod or eye blink. Thus, subjects, on whom an achievement test measure would not have been possible, can be examined successfully.

9. The subtests were designed so that no academic skills would be required other than those specifically being measured. For example, the Mathematics and General Information subtests are made fairer for the subject with reading deficiencies in that no reading is required. Furthermore, the subject does no writing on any subtest since this often inhibits and embarrasses a person who has minimal skills in spelling. In fact, the subject never uses a pencil or paper, or even handles any of the test materials during the test administration. These features should facilitate optimal test performance.

10. The PIAT format, illustrations and content were selected to hold the interest of subjects of both sexes across a broad variety of ages, intellects and cultural backgrounds. For example, the large, clear-type, bold line drawings should make the test fairer for subjects with problems of visual acuity and perception, distractability and other handicaps. Too, placing each test item on a separate page should insure that the subject is attending only to the item being administered. Furthermore, the presentation of items on relatively large pages should aid in concentrating the attention of the less mature subjects on the item at hand and also minimize the handicap to the visually impaired. Century Schoolbook was selected as the type style for the subject plates after a review of current primary school reading materials revealed that this type was used far more frequently than any other and thus would be most familiar to young subjects. Size decisions were made on subjective judgment, somewhat guided by Tinker's research (Tinker, 1965), and others (Birch et al, 1966).

A number of advantages led to the decision to utilize the Easel-Kit™ format for the two Volumes of Test Plates. Besides providing a convenient flip-page arrangement for testing, the volumes serve as compact storage and carrying cases not only for the test items, but also for the Individual Record Booklet and the Manual. Above all, the Easel-Kit™ permits the presentation of the stimulus materials at the visual angle that maximizes ease of perception. Too, the easel permits the presentation of most of the examiner's instructions in a easily-read location, out of the view of the subject. Further, the format insures that the subject

will be attending to the same item as the examiner. Finally, the easel can be used to shield the Individual Record Booklet from the subject.

11. The PIAT was carefully standardized nationally in the United States on a sample of 2,889 subjects in the mainstream of public education, selected approximately equally from each level, kindergarten through the twelfth grade.

12. A wide variety of norms have been provided so as to make the test broadly useful: grade and age equivalents, percentile ranks for both within-grade and within-age groups, and normalized standard score conversions from the percentiles. These derived scores can be obtained from raw scores on each of the five subtests, as well as for the Total Test score.

13. A Total Test index is provided. Its inclusion reflects a conviction that an overall description of achievement level is of general value since many classification decisions, as well as frequent clinical questions, are related more to overall achievement than to achievement in any one subject-matter area. However, the user should recognize that the Total Test score is a reflection of overall school achievement only when this is defined as mathematics, reading, spelling and general information. Also, reading is weighted double since two of the five subtests making up the Total Test are in this area. However, double weighting of reading seemed justified in that it is the key tool to academic learning.

14. Since extensive formal preparation is not a prerequisite for its administration, the PIAT can be administered by an array of professional persons interested in human attainment from such fields as education, psychology, speech correction, social and personnel work, medicine and vocational rehabilitation. Further, it can be effectively administered by technicians under supervision.

Potential Uses: The PIAT, as is true of other psychometric instruments, potentially serves a broad range of users and for each may perform any of a variety of functions, such as investigating, describing, classifying and predicting. In general terms, the reasons for administering tests and the uses to which the results are put fall into either or both of two broad classifications. There are those uses that collect information on an individual so as to facilitate understanding that person, planning future

courses of action and reaching decisions. This service use of tests may provide information either to the individual for his own use or to society's representatives or to both. The second major use of tests is in research as a means of extending man's knowledge about himself and his environment. The PIAT can be meaningfully utilized in both of these general ways.

The PIAT may be useful as a gross measure of the effectiveness of an educational intervention in situations where the more precise measures are not available, such as with young or handicapped subjects. For example, if a child is found to be far below expectations for him in mathematics and an individualized program is provided him to remediate the weakness, the PIAT may be readministered at the end of the program to ascertain what progress has been made and at what expense in terms of other areas of achievement. It must be recognized, however, that the reliability of comprehensive achievement test batteries are typically greater than those for a quick screening test such as the PIAT; Therefore, when appropriate and available, they would be used as a pre and post measure of scholastic growth.

SEMANTIC DIFFERENTIAL

Measurement of connotative meaning has become popular among psychologists during the past several years. The measurement was made possible by the series of statements about a theoretical construct proposed by Osgood (1952; 1960). Osgood's theory is concerned with meaning as a mediation process. He describes meaning as a learned, hypothetical event (Osgood, Suci, and Tannenbaum, 1957). Theoretically, Osgood transferred all of the conceptual machinery of the single-stage S-R psychology to a two-stage representation inside the organism. In this process, inductive descriptive laws become postulates of deductive theory.

According to Osgood's theory, the response to a stimulus is influenced by how previous similar stimuli have affected an organism. In educational situations, experiences presented to the learner are mediated by the learner's previous experiences of similar nature. "Whenever some stimulus other than the significate is contiguous with the significate, it will acquire an increment of association with some portion of the total behavior elicited by the significate as a representational mediation process". (Osgood, Suci, and Tannenbaum, 1957, p.6)

Osgood took advantage of semeiotics - study of signs - described by Morris (1946) to arrive at his references to meaning. Meaning, according to Osgood (1957), is acquired when a sign is paired with a significate. Meaning is measurable in indices, but not by definition. Semantic meaning is concerned with the relationship of signs to significates (Morris, 1946). For example, the word "table" has a definite relationship with the thing, or object, Table. "Whenever something which is not the significate evokes in an organism the same reactions evoked by the significate, it is a sign of the significate" (Osgood, Suci, and Tannenbaum, 1958, p.5).

Osgood (1957) asserted that to be behaviorally applicable, his theory should provide a basis for measuring and indexing representational states which would provide a measurement of meaning. He concluded that, "Language output provides the most discriminative and valid index of meaning. After all, this is supposed to be the function of language" (Osgood, 1957, p. 100). To measure connotative meaning, Osgood and associates at the University of Illinois devised a measuring technique which has been called the semantic differential. It is a combination of association and scaling procedures. Each subject is provided with a standardized sample of bipolar association (scales) to be made to each concept. The task is to indicate the direction of his association and its intensity on a seven step scale. "Our basic assumption is

that a limited number of specific scales, representative of underlying factors, can be used to define a semantic space within which the meaning of any concept can be specified" (Osgood, 1957, p. 100).

Osgood's analyses of his data consistently yielded three factors - evaluative, potency, and activity. The evaluative factor is identified by scales like good-bad; the potency factor by scales like strong-weak; the activity factor by scales like fast-slow. Several studies appearing in the literature illustrate the usefulness of the semantic differential.

Osgood's language model serves as the theoretical explanation for the task required of subjects in responding to the semantic differential instrument in that the responses given by subjects are thought to be at the representation or cognitive level of encoding.

Osgood's theory and the development of the semantic differential are assumed to offer means for quantitatively measuring differences of expression of connotative meaning. The instrument itself is described as having shown itself to be sufficiently reliable, valid, flexible, adaptable, and economical to administer and score (Kerlinger, 1964). Kelly and Levy (1961), Messick (1957), and Norman (1959) stressed the reliability and discriminability of the instrument. Its measurement usefulness was praised in the areas of psycho-therapy (Endler, 1961), psychological research (Johnson, 1963), and education (Husek and Wittrock, 1962).

THE TEACHER COMPETENCY INVENTORY/ARTS SURVEY FORM

This form was administered to reveal the arts background of the teachers participating in the Project and their interest, comfort, and ability in the arts.

Project teachers completed this form at the beginning and at the close of the Project. From the form, a score representing teacher interest in the arts was obtained. Ratings are as follows: Dislike-Avoid - 1; Little or No Interest - 2; Some Interest - 3; Definite Interest - 4; Very Important Interest - 5.

In addition, a score for teachers' assessments of their comfort levels in teaching the arts was obtained. Individual scale ratings were coded: Very - 3; Moderately - 2; Little or no - 1.

A similar analysis of teacher self-perception of ability in the arts can be obtained using the same scales.

ARTS FOR LEARNING GUIDE AND MODEL
EVALUATION FORM FOR ADMINISTRATORS

The Evaluation form for Administrators was designed to measure the perceptions of administrators with respect to the utility of the Arts for Learning Guide and Model. Of specific interest was administrators' views on how teachers as a group in the field test sites were responding to the use of the Guide. A three part instrument was developed to evaluate basic teacher involvement, level of aesthetic involvement of the teachers, and administrator's perceptions of the Guide itself.

Administrators were asked to rate the teachers on a scale of 1-5 as a group with respect to their usage of art, music, drama, and dance in the development of the six basic learning abilities, (gross motor development, sensory motor integration, perceptual motor integration, language development, conceptual skills and social skills) and five levels of aesthetic development (awareness, imitation, self initiation, skill development and critical judgment).

The Curriculum Guide itself was evaluated by the administrators as to their views of its content and format. They were asked to evaluate the Guide on a five point scale from Strongly Agree to Strongly Disagree on the following dimensions:

1. The effectiveness of the format of the Guide.
2. The general directions of the Guide.
3. The style of the Guide for ease of use.
4. Appropriateness of the activities to diverse populations.
5. Appropriateness of the concept areas of the Guide to diverse populations.
6. Number of activities for concept area is sufficient.
7. The directions for activities was satisfactory.
8. The number of content areas identified by the Guide is sufficient.

ARTS FOR LEARNING GUIDE AND MODEL
EVALUATION FORM FOR TEACHERS

The Evaluation form for teachers was designed to elicit data regarding the format and content of the Arts for Learning Guide and the effectiveness of the arts activities in fostering the basic learning abilities and aesthetic development.

The teachers were asked to evaluate the format and content of the Guide by addressing each of the following statements:

1. Appropriateness of the overall format of the Guide.

2. The integrity of the general directions.
3. Adequacy of the specific directions for individual activities.
4. The style of writing of the Guide.
5. Appropriateness of activities for the levels of functioning of the children at the field test sites.
6. Relationship of the concepts in the Guide to the level of functioning of the children.
7. Sufficiency of activities to a particular concept area.
8. Number of concept areas is sufficient.
9. The conceptual base is useful and understandable.

In the section on Basic Learning Abilities, the instrument addressed the individual relationship between art, dance, drama, and music as these art areas impacted on these abilities (gross motor development, sensory motor integration, perceptual motor skills, language development, conceptual skills, and social skills development). The Aesthetic Development Section concerned itself with the relationship of the four art areas to the levels of aesthetic development (awareness, imitation, self initiation, skill development and critical judgment). Teachers were asked to check those learning abilities and aesthetic levels which they felt the Guide was effective in improving.

ARTS FOR LEARNING GUIDE ACTIVITY EVALUATION FORM

The Activity Evaluation Form was designed to collect information on the utility of specific activities of the Guide as perceived by Project teachers. The following areas of interest regarding each activity were addressed:

1. Adequacy of specific directions for individual activities.
2. Appropriateness of the level of the activity to the functioning level of the class.
3. Need to adapt the activity to suit particular handicapping conditions.
4. Relationship between the activity and the learning objective.
5. Relationship of aesthetic development to specific activities.
6. Continued or future use of specific activity.

A format was developed which allowed the teacher to write in the name of each of the five weekly activities and rate them on the criteria previously mentioned. This rating took the form of a ✓ if the teacher agreed that the item met the particular criteria. Absence of the ✓ indicates that the criteria was not met. Data by each teacher was recorded weekly and sent to the project investigator. Teachers were encouraged to make comments and suggestions for lesson modifications.

ARTS FOR LEARNING GUIDE AND MODEL
LEADERSHIP EVALUATION

The Leadership Evaluation was developed to solicit expert comment on the importance of the arts activities in the Guide as agents of change in improving basic learning abilities.

Special education and/or arts university personnel were asked to indicate on a five-point scale from unimportant to extremely important, how they judged the activities presented in the arts areas in the Guide for improving the characteristic, ability or skill referred to in the item.

These characteristics included:

1. Use of the large muscles.
2. Integration of fine and gross motor activities.
3. Functional use of auditory, visual, and visual-motor skills.
4. Overall functioning in language.
5. Concept attainment and general reasoning ability.
6. Ability to cope with social situations.
7. Appreciation of what is perceived and felt.
8. Reproduction or mimicry of an object, action, or behavior.
9. Initiation of activities by oneself.
10. Making efforts to attain mastery or expertise.
11. Thinking and evaluation with respect to a standard or ideal.

They were also asked their views of the content and form of the Curriculum Guide. They checked statements with which they agreed. These evaluators were also encouraged to include additional comments regarding the effectiveness of the Model and Guide.

PROCEDURES AND METHODOLOGY

YEAR ONE

The following is a description of the procedures and methodology applied in selecting the project participants and collecting the data for Year One of Project AIE.

Following a meeting at the Conference Center, Dupont, Washington, December 2 and 3, attended by the Project Director, Key Personnel and the Task Force, Clover Park Special Education Elementary School principals notified their special education teachers and their resource teachers of the forthcoming AIE project.

Meetings to dispense information to the teachers were arranged at centrally located schools. Twenty-eight teachers from a total of seven schools attended. Twenty teachers from Southgate, Lake City, Parkway, Tillicum and Heartwood met with the planning and implementation coordinator at the Southgate School on December 6. The next day, eight teachers from Custer and Oakgrove met with him at Custer School. Seventeen out of this group volunteered to participate in the project.

At each of the two meetings the implementation coordinator informed the teachers of the nature of the project. He stated that those involved would participate in a series of orientation workshops; they would receive some assistance from various arts specialists and that they would be asked to keep an informal continuous log on the progress of the project in their classrooms. All meetings would be held during school hours and that substitute teachers would meet as a group to brainstorm, discuss their problems, participate in art, movement, music and drama workshops. He indicated that the principal investigator would visit their classrooms and work with their children periodically throughout the term. Their major task was to work with the principal investigator and to help develop a model specifically designed to infuse arts into their basic skills curriculum.

Several teachers requested additional information. The principal investigator contacted those teachers by telephone and provided some specific examples showing how arts activities

could be used to reinforce and increase basic skills. All those who volunteered were told that the experimental group and the control group would be randomly selected. All knew that some would be excluded from the project altogether. All were advised that the experimental group teachers would be asked to refrain from discussing their activities with their colleagues (to reduce the Hawthorne effect).

The following day, December 7, all the names of the teachers were written on equal size sheets of white paper (2 x 4), folded and placed in a box by the secretary at Pupil Services. A disinterested staff member, in the presence of two witnesses, drew, in alternating sequence, 5 experimental and 5 control group teachers. The order of the draw, experimental first and control second, was determined by a coin toss.

Two alternates for each group were also chosen at this time. Later that week it was decided by the Task Force to increase the N to include 7 classrooms in each group.

All teachers involved in the Project attended a meeting at which time the Semantic Differential was distributed. The teachers completed the Semantic Differential at home or school which was collected after three days by the Implementation Coordinator. The Teacher Competency Inventory/Arts Survey Form was also given to all the teachers during this first week. Experimental group teachers were informed of the first two-day orientation meetings; control group teachers were asked to continue teaching in their usual manner.

Student Data. The Assistant Administrator for Pupil Services and Coordinator for Secondary Schools undertook the responsibility to contact the psychological testing personnel. All have had experience testing handicapped children using the PIAT. Two collected data for the pre-test; three collected data for the post-test. Each of the testors arranged with the individual schools for a relatively quiet area to do the testing. The PIAT was administered to individual students over a two week period. The pre-test was administered in mid December; the post-test in late May. The 140 students from the 14 teachers' classes selected for the study were given the Peabody Individual Achievement Test (PIAT) (Dunn and Markwardt, 1970) as a pre and post-test to the curriculum intervention.

For all children participating in the pilot study, the following data were obtained: I.Q. score, birthdate and raw and standard subtest and total scores on the PIAT.

Teacher Data. All teachers (14) completed a Semantic Differential Attitude Test on a pre-test (mid December) and post-test (late May) basis. Teachers also completed a Teacher Competency Inventory/Arts Survey Form at the beginning of the project. Attendance and descriptive data were also collected. Experimental group teachers recorded their observations and suggestions regarding the curriculum development in logs. This information was compiled for inclusion in the AIE Curriculum Model.

The teachers in the experimental group worked closely with the Principal Investigator, attending special meetings during the first two weeks of the project before beginning to develop the Arts Infused Curriculum and receiving periodic visits during the project. They were assisted by several area artists who visited their classrooms. Special instruction in the preparation of objectives and collection of continuous recordings was done by the Principal Investigator. Each of the experimental group teachers was expected to provide their classes with no less than two experiences in each art medium per week for six months. The teachers in the control group conducted their classes as they normally would - with no absence of nor inclusion of imposed activities.

Throughout the developmental period the experimental group teachers devised arts experiences for individuals or groups which were supportive of basic curriculum concepts. Periodically the teachers and Principal Investigator met to evaluate the strength or limitations of specific lessons. All lessons which the teachers assessed as "successful" were included in the final curriculum guide. Originally the lessons were rated "highly successful", "moderately successful", "ineffective". This was later changed to "objectives met or unmet".

RESULTS AND ANALYSIS OF STUDENT DATA

YEAR ONE

The following is a presentation and analysis of the data collected from administering the PIAT to the students in Clover Park Schools:

The "t" test, analysis of variance (ANOVA) and analysis of covariance (ANCOVA) statistical procedures were used to analyze the data.

The following "t" test and ANOVA displays of the treatment in Tables 1-12 did not provide meaningful data. This has been attributed to restrictions in the original project proposal.

Data are first presented based on the results of the administration of the PIAT to the experimental and control groups with an ANOVA analysis. The subtests for both the raw and standard scores are presented initially with the total test scores as the final table.

Analysis of Variance

Mathematics. In both the experimental and control groups there was an increase in the raw and standard scores from the pre-test to the post-test. Results of a "t" test indicated that the raw and standard mean scores of the experimental group were greater than the control group on both the pre- and post-tests.

An analysis of variance (ANOVA) of the raw pre-test scores indicated that there was a significant difference between groups ($P < .01$). The ANOVA conducted on the raw post-test scores was also significant ($P < .03$). Further ANOVA on the standard pre-test scores indicated that there was a significant difference between groups ($P < .01$). The ANOVA on standard post-test scores was also significant ($P < .01$). Although positive changes in mathematics scores resulted in both groups, this change was not significant on either the raw scores ($P > .10$) or the standard scores ($P > .40$).

Table No. 1 -- Change in Raw Math
(N=110; Exp=54; Cont=56)

	SS	DF	MS	SD	F	P
Total	3135.93	109		5.39		
Between groups		1	56.5		1.95	0.1660
Within groups		108				

Table No. 7 -- Change in Standard Math
(N=110; Exp=54; Cont=56)

	SS	DF	MS	SD	F	P
Total	109739.55	109		31.88		
Between groups		1	492.85		0.49	0.4876
Within groups		108				

Reading Recognition. In both the experimental and control groups there was an increase in the raw and standard scores from the pre-test to the post-test. The application of a "t" test to these scores indicated that the raw and standard mean scores of the experimental group were greater than the control group on both the pre- and post-tests.

An ANOVA of the raw pre-test scores indicated that there was a significant difference between groups ($P < .01$) though there was no significant difference between the post-test scores ($P > .08$). Although positive change in raw scores was evident in both the experimental and control groups, this change was not significant ($P > .50$) between groups.

In the standard scores, there was a significant difference between groups on both the pre- and post-tests ($P < .01$). Although there was a positive change by the groups in the standard scores from the pre-test to the post-test, this change was not significant between groups when subjected to the ANOVA ($P > .90$).

Table No. 2 -- Change in Reading Recognition
(N=109; Exp=54; Cont=55)

	SS	DF	MS	SD	F	P
Total	1612.58	108		3.89		
Between groups		1	7.67		0.509	0.4771
Within groups		107				

Table No. 8 -- Change in Standard Reading Recognition
(N=109; Exp=54; Cont=56)

	SS	DF	MS	SD	F	P
Total	53474.41	108		22.36		
Between groups		1	7.34		0.02	0.9033
Within groups		107				

Reading Comprehension. There was a positive change in both the experimental and control groups in raw scores from the pre-test to the post-test. A computation of the raw scores of both groups using a "t" test indicated that the raw and standard mean scores of the experimental group were greater than the control group on both the pre- and post-tests.

The application of ANOVA to the raw pre-test scores indicated that there was a significant difference between groups ($P < .01$). On the raw post-test scores, there was no significant difference between groups ($P > .07$). Although positive change in raw scores was evident in both the experimental and control groups, there was no significant difference between groups ($P > .40$).

In the standard scores, there was significant difference between groups on both the pre-test ($P < .01$) and the post-test ($P < .02$). Although positive change in standard scores was evident from the pre-test to the post-test, this change was not significant ($P > .30$).

Table No. 3 -- Change in Reading Comprehension
(N=108; Exp=53; Cont=55)

	SS	DF	MS	SD	F	P
Total	2680.39	107		5.03		
Between groups		1	58.24		2.30	0.1321
Within groups		106				

Table No. 9 -- Change in Standard Reading Comprehension
(N=108; Exp=53; Cont=55)

	SS	DF	MS	SD	F	P
Total	82521.04	107		27.90		
Between groups		1	734.17		0.94	0.3337
Within groups		106				

Spelling. In both the experimental and control groups, there was an increase in the raw scores from the pre-test to the post-test.

The standard spelling scores for the experimental group showed a decrease from the pre- to post-test while the control group showed an increase in their standard spelling scores from the pre- to the post-test.

Results of a "t" test indicated that the raw and standard mean scores of the experimental group were greater than the control group on both the pre- and post-tests.

An ANOVA of the raw scores showed a significant difference between groups ($P < .01$) on the pre-test. The ANOVA conducted on the post-test raw scores between groups was not significant ($P > .10$).

The ANOVA on the standard pre- and post-test scores showed a significant difference between groups ($P < .01$).

Even though there were positive changes in the raw spelling scores for both groups, there was no significant difference between the experimental and control groups ($P > .90$). Since there was a negative change in the standard spelling scores between pre- and post-test for the experimental group and a positive change in the same scores for the control groups, no significant difference was shown between groups ($P > .50$).

Table No. 4 -- Change in Spelling
(N=103; Exp=53; Cont=55)

	SS	DF	MS	SD	F	P
Total	2479.97	107		4.84		
Between groups		1	0.28		0.01	0.9131
Within groups		106				

Table No. 10 -- Change in Standard Spelling
(N=103; Exp=53; Cont=55)

	SS	DF	MS	SD	F	P
Total	82459.85	107		27.89		
Between groups		1	345.81		0.45	0.5064
Within groups		106				

General Knowledge. In both the experimental and control groups, there was an increase in the raw general scores from the pre-test to post-test. The standard general scores for the experimental group showed a decrease from the pre-test to the post-test while the scores for the control group showed an increase from the pre-test to the post-test.

Results of a "t" test indicated that the raw and standard mean scores of the experimental group were greater than the control group on both the pre- and post-tests.

An analysis of variance (ANOVA) of the raw pre-test scores showed a significant difference between groups ($P < .03$). The ANOVA conducted on the raw post-test scores was not significant ($P > 0.17$).

The analysis of variance on the standard pre-test scores showed a significant difference between groups ($P < .01$). The ANOVA conducted on the standard post-test scores also showed a significant difference ($P < .05$).

Although there was a positive change in the raw general scores for the experimental group from the pre-test to the post-test, no significant difference was shown between the experimental and control group ($P > .75$).

Since there was a negative change in the standard general mean score for the experimental group (-1.4340), there was no significant difference between the experimental and control groups ($P > 0.21$).

Table No. 5 -- Change in Raw General
(N=108; Exp=53; Cont=55)

	SS	DF	MS	SD	F	P
Total	4198.38	107		6.29		
Between groups		1	3.80		0.10	0.7573
Within groups		106				

Table No. 11 -- Change in Standard General

	SS	DF	MS	SD	F	P
Total	107469.20	107		31.84		
Between groups		1	1565.47		1.54	0.2168
Within groups		106				

Total. In both the experimental and control groups, there was an increase in the raw and standard scores from the pre-test to the post-test. The application of a "t" test to these scores indicated that the raw and standard mean scores of the experimental group were greater than the control group on both the pre- and post-test.

An ANOVA of the raw pre-test scores indicated that there was a significant difference between groups ($P < .01$), though there was no significant difference between the post-test scores ($P > .06$). Although positive changes in raw scores were evident in both groups, these changes were not significant between groups ($P > 0.2378$).

In the standard scores, there was a significant difference between groups on the pre- and post-tests ($P < .01$). Although there was a positive change by the groups on the standard scores from the pre-test to post-test, this change was not significant when subjected to the ANOVA ($P > .16$).

Table No. 6 -- Change in Raw Total
(N=107; Exp=53; Cont=54)

	SS	DF	MS	SD	F	P
Total	20816.47	106		14.08		
Between groups		1	279.40		1.41	0.2378
Within groups		105				

Table No. 12 -- Change in Standard Total
(N=93; Exp=52; Cont=41)

	SS	DF	MS	SD	F	P
Total	30895.45	92		18.42		
Between groups		1	659.02		1.94	0.1669
Within groups		91				

Analysis of Covariance

Analysis of covariance, considering the variables described previously to equate the groups, was considered as the conclusive data treatment procedure.

Analysis of covariance was selected as the data analysis technique to determine if there were significant differences between the experimental and control groups. In using this method, one is able to statistically equate groups on one or more selected variables, the covariates, such that any differences which are found between groups are then more readily attributable to the experimental treatment. For these particular analyses, the independent variable was group membership (experimental vs. control), and the dependent variables were raw and standard scores on the Peabody Individual Achievement Test (PIAT) administered at the conclusion of the curriculum intervention. When raw scores served as the dependent variables, the selected covariates were the child's score on an intelligence test and age in months. When standard scores served as the dependent variables, only IQ score was used as a covariate since it was assumed that conversion to standard scores in of itself removed variance due to age.

Thus, for all children participating in the pilot study, the following data were obtained: IQ score, birthdate, and raw and standard subtest and total scores on the PIAT. (Unfortunately, IQ scores were not available for a number of children, a situation which reduced the sizes of both the experimental and control groups.) Birthdate was converted to age in months; the data were then keypunched and submitted to computer analysis.

Mathematics Subtest. The results of analysis using the mathematics subtest raw scores are presented in Tables 13a and 13b. As Table 13a shows, the results were in the expected direction, with the experimental group adjusted mean (25.70) exceeding the control group adjusted mean (22.97).^{*} However, this difference in group means was nonsignificant using a .05 level of significance.

Reading Recognition Subtest. Tables 14a and 14b present the results of the analysis of covariance using reading recognition raw score as the dependent variable. Again, the experimental group adjusted mean (27.91) exceeded the control group adjusted mean (25.26), but this difference did not attain significance at the .05 level.

^{*}In the table for this analysis and all subsequent tables in this report, adjusted means are presented. Adjusted means are those obtained when groups are statistically equated on the covariate(s).

TABLE 13
Mathematics Subtest
Raw Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	49	25.70
Control	58	22.97

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates:	14733.31	2	111.31	< .05
I.Q.	6956.53	1	105.11	< .05
Age	7426.13	1	112.21	< .05
Treatment	176.70	1	2.67	Nonsignificant
Explained	14910.01	3		
Residual	6816.61	103		
Total	21726.62	106		

TABLE 14
Reading Recognition Subtest
Raw Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	49	27.91
Control	58	25.26

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates:	10644.78	2	77.46	< .05
I.Q.	4697.38	1	68.36	< .05
Age	5695.05	1	82.88	< .05
Treatment	166.44	1	2.42	Nonsignificant
Explained	10811.22	3		
Residual	7077.41	103		
Total	17888.64	106		

Reading Comprehension Subtest. The results of analysis with reading comprehension raw score as the dependent variable are given in Tables 15a and 15b. The difference in group means was nonsignificant, although again the results were in the desired direction, with the experimental group mean (26.81) exceeding the control group mean (24.73).

Spelling Subtest. Tables 16a and 16b present the results of the analysis of covariance using spelling subtest raw scores. As in the previous analyses, the experimental group achieved a higher mean value (26.86) than did the control group (24.52). However, the difference in group means was found to be nonsignificant at the .05 level.

General Information Subtest. Tables 17a and 17b present the results of the analysis of covariance with general information raw score as the dependent variable. The results were in the desired direction, with the experimental group mean (22.75) exceeding the control group mean (21.45), but this difference was nonsignificant.

Total Test. The results of the analysis of covariance with total test score as the dependent variable are shown in Tables 18a and 18b. For this analysis, the difference between the experimental group mean (129.94) and the control group mean (118.64) was significant in the desired direction.

TABLE 15
Reading Comprehension Subtest
Raw Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	48	26.81
Control	58	24.73

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates:	10957.99	2	106.71	< .05
I.Q.	4984.63	1	97.08	< .05
Age	5583.76	1	108.75	< .05
Treatment	102.21	1	1.99	Nonsignificant
Explained	11060.20	3		
Residual	5237.24	102		
Total	16297.44	105		

TABLE 16
Spelling Subtest
Raw Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	48	26.86
Control	58	24.52

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates:	7816.58	2	64.60	< .05
I.Q.	3375.76	1	55.80	< .05
Age	4163.92	1	68.83	< .05
Treatment	128.55	1	2.13	Nonsignificant
Explained	7945.13	3		
Residual	6170.77	102		
Total	14115.90	105		

TABLE 17
General Information Subtest
Raw Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	48	22.75
Control	58	21.45

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates:	16128.06	2	111.28	< .05
I.Q.	7677.11	1	105.94	< .05
Age	7876.72	1	108.69	< .05
Treatment	40.00	1	.55	Nonsignificant
Explained	16168.05	3		
Residual	7391.80	102		
Total	23559.85	105		

TABLE 18
Total Test
Raw Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	48	129.94
Control	58	118.64

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates:	299009.04	2	200.41	< .05
I.Q.	135335.08	1	181.42	< .05
Age	153045.89	1	205.16	< .05
Treatment	3014.92	1	4.04	< .05
Explained	302023.96	3		
Residual	76091.14	102		
Total	378115.10	105		

Analyses Using Standard Scores. It should be noted that in a large number of cases, raw scores on subtests or total test were not translated into standard scores. In these cases, there was apparently a "floor" effect; that is, the raw scores of children were too low to be converted into corresponding standard scores. These cases were necessarily omitted from the analyses, with resulting substantial decreases in group sizes.

Mathematics Subtest. Tables 19a and 19b present the analysis of covariance results when mathematics standard score was used as the dependent variable. As Table 19a shows, the experimental group adjusted mean (86.23) exceeded the control group adjusted mean (82.41), but this difference was nonsignificant using a .05 level of significance.

Reading Recognition Subtest. The results of the analysis of covariance with reading recognition standard scores are given in Tables 20a and 20b. The experimental group achieved a higher adjusted mean value (85.31) than did the control group (81.69), but the difference in group means was nonsignificant.

Reading Comprehension Subtest. Tables 21a and 21b show the results of the analysis when reading comprehension standard score served as the dependent variable. Again, the results were in the expected direction, with the experimental group demonstrating a higher mean value (85.32) than the control group (81.45). However, this difference did not attain significance.

TABLE 19
Mathematics Subtest
Standard Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	39	86.23
Control	32	82.41

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates: IQ	1481.26	1	14.91	< .05
Treatment	241.53	1	2.43	Nonsignificant
Explained	1722.79	2		
Residual	6754.96	68		
Total	8477.75	70		

TABLE 20

Reading Recognition Subtest
Standard Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	44	85.31
Control	43	81.69

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates: IQ	2263.14	1	22.70	< .05
Treatment	245.87	1	2.46	Nonsignificant
Explained	2509.01	2		
Residual	8374.71	84		
Total	10883.72	86		

TABLE 21

Reading Comprehension Subtest

Standard Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	38	85.32
Control	37	81.45

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	<u>F</u>	Significance of <u>F</u>
Covariates: IQ	3308.73	1	42.65	< .05
Treatment	242.17	1	3.12	Nonsignificant
Explained	3550.90	2		
Residual	5585.29	72		
Total	9136.19	74		

Spelling Subtest. Tables 22a and 22b present the analysis of covariance results with spelling standard score as the dependent variable. The experimental group mean (84.03) exceeded the control group mean (81.94), but the difference in group means was non-significant.

General Information Subtest. The results of the analysis of covariance with general information standard scores are given in Tables 23a and 23b. In this instance, the adjusted mean for the control group (86.39) exceeded the adjusted mean for the experimental group (85.98). The difference between group means was non-significant.

Total Test. Tables 24a and 24b present the results of the analysis of covariance using total test standard score as the dependent variable. Unlike the analysis using raw score as the dependent variable, the difference between total standard score adjusted means was nonsignificant at the .05 level. The experimental group had a standard score mean of 80.47 while the control group had a standard score mean of 79.43.

TABLE 22
Spelling Subtest
Standard Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	41	84.03
Control	34	81.94

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates: IQ	611.17	1	7.00	< .05
Treatment	74.89	1	.86	Nonsignificant
Explained	686.06	2		
Residual	6285.46	72		
Total	6971.52	74		

TABLE 23
General Information Subtest
Standard Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	40	85.98
Control	39	86.39

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates: IQ	2638.41	1	37.33	< .05
Treatment	3.05	1	.04	Nonsignificant
Explained	2641.46	.2		
Residual	5372.06	76		
Total	8013.52	78		

TABLE 24
Total Test
Standard Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	42	80.47
Control	33	79.43

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates: IQ	2425.41	1	55.00	< .05
Treatment	18.56	1	.42	Nonsignificant
Explained	2443.97	2		
Residual	3175.02	72		
Total	5618.99	74		

Of the total of 12 analyses of covariance, 1 resulted in a significant difference between experimental and control group means: The members of the experimental group demonstrated a significantly higher level of achievement than did those in the control group, as measured by total test raw scores on the PIAT. Of the remaining 11 analyses, 10 were in the expected direction (experimental group mean exceeding control group mean), although nonsignificant.

If one wishes to offer explanations as to why differences in group means on subtest scores are nonsignificant while a difference in group means on total test scores is significant, one might consider the psychometric characteristics of the instrument. In general (with the exception of the reading recognition subtest at some grade levels), reliability of PIAT subtests is lower than that of the total test. The reliability or precision of a test has implications for the power of any test of significance between treatment conditions; that is, the more reliable the instrument, the less the error and the greater the probability of finding significant differences when they exist.

Thus, the total test, with its somewhat higher reliability, when used as the dependent variable, would be more likely to produce a treatment effect where in reality it does exist.

That total test raw scores demonstrated a significant difference between groups while total test standard scores did not, is quite understandable when one considers the reduced range in standard scores. Varying numbers of children who scored extremely low on subtests or total test were eliminated from the computations because standard scores were unavailable. For the analysis involving the mathematics subtest standard scores, 25.3% were eliminated; for reading recognition, 8.4%; for reading comprehension, 21.1%; for spelling, 21.1%; for general information, 16.8%; and for total test, 21.1%. The resulting loss in degrees of freedom as well as the direct effect on experimental and control group values would mitigate against the attainment of a significant difference between groups.

Related to the above issues is the question of the reliability of the PIAT for measuring achievement in marginal students. Given that standard scores are not available for very low raw scores, one might conclude that this instrument is limited in its applicability to the population served by this project. Perhaps the mere absence of standard scores reflects the test developers' recognition that the instrument lacks precision in measuring low levels of achievement. Therefore, tests of significance with PIAT scores as dependent variables and groups composed of very low achievers might lack power, and hence not generate differences where differences do exist.

TABLE 24
Total Test
Standard Scores

a. Group Means

Group	N	Adjusted Mean
Experimental	42	80.47
Control	33	79.43

b. Analysis of Covariance Summary Table

Source	Sum of Squares	Degrees of Freedom	F	Significance of F
Covariates: IQ	2425.41	1	55.00	< .05
Treatment	18.56	1	.42	Nonsignificant
Explained	2443.97	2		
Residual	3175.02	72		
Total	5618.99	74		

RESULTS AND ANALYSIS OF TEACHER DATA

SEMANTIC DIFFERENTIAL

Table I lists the seventeen areas assessed showing the number of teachers (N), the mean score (X) and the standard deviation (SD) of the pre and post test for the Experimental and Control groups. Also shown is the comparison of the two groups on the pre and on the post test using a T test.

Table I shows that the attitudes of the two groups of teachers differed significantly in three of the seventeen areas on the pre test. The Experimental group teachers were significantly more positive about "basic skills" while the Control group teachers were significantly more positive about the areas of "dance" and "things students like to do best". Overall, even though both groups were very positive, the Experimental group was more positive in twelve of the seventeen areas and significantly more positive overall (beyond the .005 level).

Post test data analysis shows no significant difference in the attitudes of the two groups. In fact, the groups have nearly identical overall mean scores.

Table II shows that on the pre test, the Control group was more positive in its attitude by an average of +1.71. But by the time of post testing, the Experimental group was slightly more positive (-.10). Of special interest is the change in attitude between testing periods. As shown in Table II, the Experimental group teachers' attitude became more positive in eight of the seventeen areas, less positive in six of the seventeen areas and did not change in the remaining three areas. On the other hand, the Control group changed for the worse (became less positive) in all but two of the seventeen areas. Overall, the Experimental groups teachers' attitude became slightly more positive (+.22) while the Control group teachers' attitude became considerably less positive (-1.59).

To summarize, the Control group teachers' attitude was initially significantly more positive than the Experimental group teachers. However, as time passed, the Control group teacher's attitude changed significantly in a less positive direction. However, the Experimental group teacher's attitude did not change.

One possible but guarded interpretation is that original enthusiasm as shown by an initially positive attitude diminishes as time passes. If this is the case, then perhaps the special training provided for the Experimental group teachers functioned to maintain a consistently positive attitude over time. That is, perhaps the training prevented the natural decrease in positive attitude. While this interpretation of the data may be highly possible, it must be guarded for three reasons: 1) the relatively small sample of teachers; 2) the fact that the groups' attitude scores differed significantly on the pre test; and 3) the validity of the procedure used for assessing teacher attitude.

The following comments were derived from the pilot study data:

1. Nearly all findings, even when nonsignificant, were in the expected direction. Of course, no conclusions can be drawn from nonsignificant findings; however, the generally consistent pattern of mean differences is certainly encouraging.

2. This pilot study encompassed a time span of approximately six months. When one considers the general purpose of the intervention and the population served, a six-month period is probably somewhat limiting in achieving desired outcomes. Again, given this limitation, the pattern of findings is encouraging and one would hope that the desired treatment effect could be enhanced with a longer intervention period.

3. As noted in the discussion section, some attention should be given to examining the reliability of the PIAT for low-level achievers. Perhaps other dependent measures might prove to be more reliable and/or more appropriate measures of project goal attainment. Along these same lines, the design of further evaluation efforts should include the use of appropriate covariate measures aimed at maximizing the power of tests of significance.

In summary, the data suggest that the program may very well have merit in effecting treatment outcomes. Preliminary findings are encouraging, especially considering the short time span that children were exposed to the treatment.

TABLE I
Attitude Evaluation

AREA	PRE TEST								POST TEST							
	Experimental			Control			Comparison		Experimental			Control			Comparison	
	N	\bar{X}	SD	N	\bar{X}	SD	T	P	N	\bar{X}	SD	N	\bar{X}	SD	T	P
Basic Skills	4	27.25	1.29	6	24.66	1.00	-2.31	.035	7	23.20	1.00	7	24.14	1.79	.41	NS
Learning	4	23.25	4.76	6	25.33	1.96	.72	NS	7	23.05	4.61	7	24.42	4.10	.22	NS
Actu	4	25.00	2.54	6	24.66	2.11	-.19	NS	7	23.05	3.02	7	22.57	4.02	-.69	NS
Dance	7	21.20	3.19	7	24.71	1.57	-2.36	.025	7	21.00	3.46	7	22.71	3.16	.06	NS
Inservice	7	22.05	3.10	7	22.57	3.15	-.15	NS	7	19.57	4.40	7	21.05	4.11	.21	NS
Fun	7	24.42	3.37	7	25.71	2.41	-.76	NS	7	24.42	3.20	7	22.54	3.25	-.95	NS
Teaching	7	24.71	4.65	7	24.00	2.06	.14	NS	7	24.57	3.37	7	22.05	5.10	-.67	NS
Learning	7	23.20	4.33	7	23.42	4.06	-.05	NS	7	21.20	3.41	7	20.05	4.64	-1.01	NS
Theatre	7	22.14	4.25	7	22.00	2.07	-.06	NS	7	21.53	3.06	7	22.42	4.59	.37	NS
Visual Arts	7	20.42	4.02	7	21.20	2.43	1.49	NS	7	21.14	3.10	7	19.57	6.01	-.56	NS
Student Growth	7	21.14	4.67	7	25.20	1.02	1.04	NS	7	23.14	3.56	7	22.00	4.07	-.51	NS
Things I like																
to do best	7	21.14	4.05	7	25.20	1.97	1.00	NS	7	23.71	4.41	7	22.14	4.73	-.59	NS
Students Learning																
Basic Skills	7	21.14	4.42	7	23.20	2.60	1.02	NS	7	22.20	3.00	7	21.42	4.65	-.34	NS
Things Students																
like to do best	7	10.57	2.66	7	23.00	2.06	3.21	.005	7	20.71	4.13	7	22.05	3.26	1.00	NS
Basic	7	22.14	4.02	7	25.71	2.10	1.66	NS	7	23.05	3.71	7	24.05	4.00	.44	NS
Student Growth Art	7	21.71	4.13	7	24.71	2.91	1.45	NS	7	22.57	1.76	7	23.00	5.20	.19	NS
Student Records																
Basic Skills in																
the Arts	6	21.50	4.34	7	23.00	3.02	.65	NS	7	22.14	3.04	7	23.00	3.05	.41	NS
OVERALL	109	22.42	4.45	116	24.11	2.75	3.56	.005	119	22.64	3.70	119	22.54	4.54	-.10	NS

TABLE FI

Attitude Differences and Changes

AREA	MEAN DIFFERENCE (C-E)		CHANGE IN ATTITUDE (Post-Pre)	
	PRE	POST	EXPERIMENTAL	CONTROL
Basic Skills	-2.59	+ .86	-3.97	- .52
Learning	+2.08	+ .57	+ .60	- .91
Arts	- .34	-1.28	-1.15	-2.09
Dance	+3.43	+1.71	- .28	-2.00
Inservice	- .28	+2.28	-3.28	- .72
Fun	+1.29	-1.85	0.00	-3.17
Teaching	- .71	-1.72	- .14	-1.15
Learning	+ .14	-2.43	0.00	-2.57
Theatre	- .14	+ .85	- .61	+ .42
Visual Arts	+2.86	-1.57	+ .72	-3.71
Student Growth	+2.14	-1.14	0.00	-3.28
Things I like to do best	+2.14	-1.57	+ .57	-3.14
Student Learning in Basic Skills	+2.14	- .86	+1.14	-1.86
Things Students like to do best	+4.43	+2.14	+2.14	-1.85
Music	+3.57	+1.00	+1.71	- .86
Student Growth in Arts	+3.00	+ .43	+ .86	-1.71
Student Learning Basic Skills in the Arts	+1.50	+ .86	+ .64	0.00
TOTALS	+1.71	- .10	+ .22	-1.59

+ means control more
positive
- means experimental
more positive

+ means more positive
- means less positive

THE TEACHER COMPETENCY INVENTORY/ARTS SURVEY FORM

Several key questions were posed to the fourteen teachers participating in the Arts in Education Project to determine their background and needs. Several questions focused on the teachers personal interest and capability in presenting arts education programs.

Background Information. When asked if they had "classes or private lessons" in the Arts, approximately 86% of the teachers responded affirmatively. The range of lessons was quite diverse. A rank order of the lesson areas revealed that most had engaged in classes or received private lessons in either "art education" or "musical instruments". The following rank order of the responses points out that few individuals had received classes or lessons in drama, drama education, puppetry or film making.

RANK ORDER OF CLASSES AND LESSONS TAKEN BY AIE TEACHERS

<u>RANK</u>	<u>AREA</u>	<u>NUMBER OF RESPONSES</u>	<u>PERCENTAGE</u>
1.	Art Education	10	71.4%
1.	Music (Instrumental)	10	71.4%
3.	Music Education	9	64.3%
4.	Art	8	57.1%
5.	Creative Writing	7	50.0%
6.	Crafts	6	42.8%
6.	Music (Vocal)	6	42.8%
8.	Dance	5	35.7%
9.	Poetry	3	21.4%
10.	Drama	2	14.2%
10.	Drama Education	2	14.2%
10.	Puppetry	2	14.2%
13.	Film Making	0	0.0%

In the interest of attempting to identify where training was acquired an additional question was posed to the teacher. The question asked the teacher to identify the area of training by classes, private lessons, inservice training or other form. An

overwhelming majority of the responses indicated that they received their training at colleges and universities. Only private lessons in musical instruments received any notable response in the other categories. Of interest was the lack of inservice training being provided or engaged in by the teachers.

Personal interest in art areas. Although private lessons and classes in musical instruments were the highest ranked areas of training, the teachers "personal interests" in the arts varied. "Crafts" (although ranked 5th in training) was highest ranked area of interest of the teachers. Art and puppetry were also ranked quite high as areas of interest. The following table illustrates the rank order of the teachers areas of interest.

RANK ORDER OF TEACHERS PERSONAL INTERESTS IN ART AREAS

<u>RANK</u>	<u>AREA</u>	<u>VALUE POINTS*</u>
1.	Crafts	56
2.	Art	52
2.	Puppetry	52
4.	Music (Vocal)	46
5.	Drama	44
6.	Music (Instrumental)	42
7.	Poetry	38
7.	Film Making	38
9.	Creative Writing	36
9.	Dance	36

*NOTE: This was determined by assigning 5 points to a response of "very interested", 3 points to "moderately interested" and 1 point to "little or no interest".

Level of expertise. When asked how comfortable they would feel in presenting a specific art form, the teachers responses proved quite interesting. Only 12.9% of the teachers felt "very comfortable" in presenting a class experience in any of the areas, 32.1% felt "moderately comfortable", 25.0% felt "slightly comfortable" and 30.0% "did not feel comfortable at all".

This may point out an area of concern in that more than half of the responses (55.0%) indicate a reticence or absolute inability to provide a classroom experience.

Teachers generally felt comfortable in teaching "crafts" "art" "music (vocal)" "puppetry" and "creative writing". In contrast, they did not feel comfortable in presenting "film making" "dance" "music (instrumental)" "drama" or "poetry".

Opinions and Needs. When the teachers were asked if they thought it was "important to use 'the arts' as an integral part of their teaching," 65.7% responded affirmatively. Only 7.1% indicated a negative response while an additional 7.1% felt it was "supplementary, not integral".

On the subject of integrating the arts into classroom teaching, the majority of teachers considered the arts to be "knowledge/skills, original expression, appreciation/value". Due to the fact that the question listed eleven possible answers, there was a wide range of answers. Six teachers did not complete this question which may be attributed to an oversight on their part or confusion in answering the questionnaire.

The teachers expressed their need to obtain new ideas in several areas. The following table rank orders those needs.

RANK ORDER OF TEACHER NEEDS

<u>RANK</u>	<u>AREA</u>
1.	Puppetry
1.	Drama
3.	Dance
4.	Art
4.	Crafts
6.	Music (Vocal)
7.	Music (Instrumental)
8.	Creative Writing
8.	Poetry

The teachers felt they needed help in a number of areas. The following list indicates the "type of help" needed by the teachers.

RANK ORDER OF TYPE OF HELP NEEDED BY TEACHERS

<u>RANK</u>	<u>TYPE OF HELP</u>
1.	Inservice training
1.	Strategies for incorporating "Arts" into subject areas
3.	Materials
4.	People resources
4.	Tools/equipment
4.	Techniques of fostering a creative environment
7.	More hours in a day
8.	Always money
9.	Released time
9.	Space
9.	Mental
9.	Release time would be nice
13.	Administrative support
13.	Multicultural input
13.	Field trips

Summary. Teachers were quite experienced in the somewhat traditional areas of "the arts" such as music and art education, musical instrument playing, etc., but not trained in areas such as drama, dance, poetry, film making, etc. Most teachers received their training at colleges and universities. This is of special interest because when identifying the "type of help" needed, the teachers ranked "inservice training" as their highest area.

It is interesting to note that the area of "dance" was one which very few teachers had received preparation, few felt competent to instruct or conduct in class experiences but was ranked high (third) by teachers in terms of their needs for new ideas and training.

Another observation was that very few teachers felt competent to conduct in class experiences in art areas. More than 55% indicated a reticence or absolute inability to provide classroom experiences. This may point out the need for some inservice training for teachers of special education classes.

It should be noted that several questions on the "Teacher Inventory" were not responded to in appropriate manner by the teachers negating their use in this report. For instance, the teachers were asked to indicate how often they used the arts in the teaching of various subjects such as language arts, math, science, etc. Evidently many teachers did not understand the question as presented.

PROCEDURES AND METHODOLOGY

YEAR TWO

Following is a description of the procedures for the selection of Project participants and the collection of data for Year Two of Project AIE.

Coordinators of the Arts for the Handicapped Resource and Information Network were contacted for their advice and assistance in selecting three sites representing geographical spread and a wide variety of handicapping conditions. An important consideration was the availability of NCAH program personnel nearby who could provide support for the Project.

The three sites chosen were:

Clover Park School District in Tacoma, Washington which had participated in Year One of the Project and where an AHRIN site was located.

St. Louis Special School District in St. Louis, Missouri where an AHRIN site is located at Cemrel, Inc., an educational laboratory with a particular interest in the arts.

Celantano School in New Haven, Connecticut where a Model Site is located at the Children's Museum and a Special Project Site is located at the Southern Connecticut State College.

These three sites represented a wide spectrum of handicapping conditions and levels of deficit including emotional disturbance, mental retardation at the mild, moderate and severe levels, sensory impairment, orthopedic impairment, and learning disability.

At the site in Celantano School, random assignment to the experimental and control groups was not possible and this entire school participated as an experimental group.

At the St. Louis Special School District site, random assignment to experimental and control groups was by school rather than individual classrooms.

At the Clover Park School District site, random assignment to control and experimental groups was by classroom.

At each of these sites, a site administrator assumed responsibility for selecting personnel to administer the PIAT and supervised the collection of pre and post test data. Test administration was accomplished over a two-week period on site at each participating school.

Each teacher involved in the Experimental Group at all three sites was asked to complete a Teacher Competency Inventory/Arts Survey and a measurement of Aesthetic Growth for each student in the Experimental Group Classroom as pre and post evaluation instruments.

An on-site coordinator worked closely with all teachers in the Experimental Group, conducting meetings on a regular basis, planning arts workshops and assisting the teachers in their evaluation of the activities in the Arts for Learning Guides and in the preparation of their logs with suggestions for refinement and modification of the arts activities. Each experimental group teacher was expected to provide the students in their classes with no less than eight arts lessons per week, two in each art media. Adherence to this expectation was not uniform. The teachers in the control group conducted their classes as they normally would - with no special emphasis on infusion of the arts.

Parents of experimental group students were asked to complete a form designed to measure their perceptions of aesthetic growth in their children at three intervals during the intervention period. Compliance with this request was not required for participation in the Project and few parents completed the form for all three intervals.

Throughout the duration of the Project, experimental group teachers received arts materials and information. The Project coordinator made regular visits to the classrooms and recorded observations, making suggestions to the teachers and responding to their questions.

DESCRIPTION OF TEACHERS

YEAR TWO

The following describes the twenty- six teaching personnel of the AIE project at the three field sites during year two:

CLOVER PARK SCHOOLS - TACOMA PARK, WASHINGTON

This site was comprised of six special education and two regular education teachers. There were two male teachers and six female teachers. The average age of the teachers was 36.1 and the average number of years of experience was 8.3. Analysis of educational background indicated almost all with bachelors degrees. Related arts background of the teachers spanned all four arts areas - visual art, dance, drama and music - with the majority indicating a greater background in music.

ST. LOUIS SPECIAL SCHOOL DISTRICT

This site was comprised of eleven female special education teachers and aides. The average age of the teaching personnel was 38.3 and the average number of years of experience was 5.2. Analysis of educational background indicated most teachers with masters degrees and two of three aides with bachelors degrees. Related arts background of teachers and aides spanned all four arts areas equally - visual art, dance, drama and music.

CELANTANO SCHOOL - NEW HAVEN, CONNECTICUT

This site was comprised of seven female special education teachers. The average age of the teachers was 25.4 and the average number of years of experience was 2.5. Analysis of educational background indicated almost all with bachelors degrees. Related arts background of the teachers spanned all four arts areas - visual art, dance, drama and music - with the majority of the teachers indicating visual art and music as the major part of their formal training in the arts.

AIE SITE TEACHING PERSONNEL

AIE SITE	\bar{X} AGE OF TEACH	SEX		EDUCATION			TEACH POSITION			\bar{X} NO. OF YEARS TEACH	ARTS BACKGROUND			
		M	F	BACH	MAST	POST MAST	REG	SP TEACH	OTHER		U	D	DN	ML
CLOVER PARK	36.1	2	6	7	1	-	2	6	-	8.3	3	1	2	7
ST. LOUIS	38.3	-	11	2	6	1	-	8	3 AIDES	5.2	8	8	6	7
NEW HAVEN	25.4	-	7	5	2	-	-	7	-	2.5	5	3	2	5

DESCRIPTION OF PARTICIPATING CLASSES/STUDENTS

YEAR TWO

CLOVER PARK SCHOOLS - TACOMA, WASHINGTON

One hundred sixty seven students from 7 schools in Clover Park participated in the project. Handicapping conditions included: mild and moderate mental retardation, learning disabilities, multiply handicapped, sensory handicapped hearing impaired, neurologically impaired, and emotionally disturbed. Range was 6.2 to 13.9 years. The majority of these children had been in special programs throughout their schooling.

This group was sub-divided randomly into two groups: experimental and control. 74 children ranging in age from 6.2 to 12.7 years became the experimental group, and 93 children ranging in age from 6.5 to 13.9 years were the control.

ST. LOUIS SPECIAL SCHOOL DISTRICT

Four special schools within the Special School District participated in Project AIE. Two schools, Park and Westview Schools, were designated as the experimental settings for 79 physically handicapped elementary school aged students found in eight groups. Two centers, Ackerman and Litzsinger Schools, were designated as control settings for physically handicapped elementary school aged students. The age range in the experimental group was 5-17, with a mean age of 10.1 years. The age range in the control group was 5-18, with a mean age of 10.4 years.

CELANTANO SCHOOL - NEW HAVEN, CONNECTICUT

Selection of children to participate in the New Haven project was done through the New Haven Program for Handicapped Children, a joint project of the New Haven Board of Education, the Clifford Beers Guidance Clinic, and Southern Connecticut State College.

A total of 72 students participated. The breakdown of ages was: 16 preschool, 17 primary, 20 intermediate and 19 adult. The preschool group consisted of children whose handicapping conditions were mild mental retardation, emotional disturbance and learning disabilities. Students from the primary, intermediate and adult classes were trainable mentally retarded.

YEAR TWO

RESULTS AND ANALYSIS OF STUDENT AND TEACHER DATA

The following two reports were completed by third party evaluators. The first report analyzes data collected from the PIAT, the Checklist for Parents and Teachers: Artistic Growth in children, Parent's Checklist for Artistic Interest and Growth, and an Arts Survey. The evaluators were: Daniel W. King, Ph. D., Department of Psychology, Central Michigan University, Mt. Pleasant, Michigan; M. Daniel Jacobovitch, Ph. D., School of Journalism, Kent State University, Kent, Ohio; Lynda A. King, Ph. D., Department of Educational Psychology, University of Washington, Seattle, Washington.

The second report, prepared by Carl H. Koenig, Ph. D., International Management Systems, Inc., Kansas City, Missouri, used a norm-referenced approach to analyze data from the PIAT in assessing the effectiveness of the Arts Infused Curriculum on basic academic skills.

REPORT NUMBER ONE, AIE PROJECT-YEAR TWO

Prepared by: Daniel W. King, Ph.D., Department of Psychology
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The report presented in the following pages addresses the question of whether the arts-infused curriculum used in the Arts in Education for Handicapped Children (AIE) project resulted in observable cognitive growth in the participating student population. Outcomes of the program on parent and teacher assessments of students provide collaborative data on the effectiveness of the curriculum intervention.

The authors of this report were involved neither in the selection of dependent measures nor in the development of instruments. This report is based solely on available observations.

Analyses were conducted on data obtained from four forms used in the AIE project:

1. Descriptive Data for Project AIE (Data: subtest and total scores on the Peabody Individual Achievement Test for students in experimental and control groups; ages of students; sex of students)
2. Checklist for Parents and Teachers: Artistic Growth in Children (Data: parent and teacher evaluations of childrens' artistic levels on five skill dimensions and four art forms)
3. Parent's Checklist for Artistic Interest and Growth (Data: parent evaluations of the child's artistic interest and ability in four art forms with 18 component skill areas)
4. Arts Survey (Data: self-ratings of teachers participating in the AIE project)

In addition to data from the above forms, a supplementary listing of IQ scores was obtained for students in two of the

three AIE sites. All data were coded, keypunched, and submitted to computer analysis. A .05 level of significance was selected.

Peabody Individual Achievement Test Data

Peabody Individual Achievement Test (PIAT) data from experimental (arts-infused curriculum) and control groups in the AIE project were analyzed to evaluate the impact of the curriculum intervention on students' cognitive growth. The PIAT yields five subtest scores (math, reading recognition, reading cognition, spelling, and general information) and a total score obtained as the sum of scores on the subtests. A series of two-way analyses of covariance were used with posttest PIAT subtest and total raw scores serving as the dependent variables. Independent variables were sex of student and group membership (experimental versus control). Analysis of covariance was used as the data analysis technique to statistically equate experimental and control groups on selected variables (the covariates), and thus reduce the probability that any treatment effects were attributable to initial differences in group composition.

The basic sets of analyses of covariance were performed. Originally, data were analyzed collectively for all three AIE sites (New Haven, Clover Park, and St. Louis) and individually for two sites having control groups (Clover Park and St. Louis) using pretest PIAT total score and student's age in months as the covariates. When IQ scores later became available for the Clover Park and St. Louis students, additional analyses were performed using IQ and age in months as the covariates. Outcomes were essentially the same regardless of the choice of covariate. Results reported below are derived from analyses using the IQ covariate for Clover Park and St. Louis data and, by necessity, the pretest PIAT covariate for the combined three-site data.

Results: Clover Park

Outcomes of the analysis of PIAT data for Clover Park experimental and control groups are presented in Table 1.

Control group students scored significantly higher than experimental group students on the math, reading cognition, and spelling subtests of the PIAT. Total test scores were also significantly higher for control group students. A significant main effect for sex was also found on the math and general information subtests, with males scoring significantly higher than females in both cases. There was no significant interactions between group membership and sex of student.

Table 1. Mean¹ Posttest PIAT Subtest and
Total Scores: Clover Park

Score	Group Membership				Sex			
	Experimental	Control	F	p	Male	Female	F	p
Math	28.75	31.99	5.88	.017*	31.58	27.93	6.92	.010*
Reading Recognition	28.37	30.32	2.04	.157	29.51	29.64	.01	.933
Reading Cognition	26.73	29.94	8.06	.005*	28.83	28.06	.38	.537
Spelling	27.50	30.07	4.45	.037*	28.79	29.86	.64	.425
General Information	28.24	25.91	2.04	.157	27.98	23.12	7.41	.008*
Total	139.64	147.93	3.49	.048*	146.53	138.20	3.36	.070
	N=45	N=67			N=86	N=26		

¹ Adjusted for covariates
* Significant

Results: St. Louis

Outcomes of the analysis of PIAT data for St. Louis experimental and control groups are presented in Table 2.

No significant main effects for group membership or sex of student were demonstrated on the subtest or total test scores. There were no significant interactions between group membership and sex.

Results: All Sites

Results of the analysis of combined three-site PIAT data are presented in Table 3.

Control group students scored significantly higher than experimental group students on the PIAT math subtest. Males scored significantly higher than females on the general information subtest, while females scored significantly higher than males on the spelling subtest. There were no significant interactions between group membership and sex of student.

Discussion

Where differences between mean control group and mean experimental group PIAT scores emerged, it was the control group which scored higher than the art-infused curriculum group. Though small, these differences did attain statistical significance. While these findings may be somewhat disturbing in light of the major project goal, they may not be too surprising when one considers the particular skills that the PIAT measures. It is quite probable that control group students, exposed to the more traditional curricula throughout the school year, were allowed more practice in such skills as spelling and math than were students in the arts-infused curriculum groups. In this regard, the failure of the PIAT to demonstrate cognitive growth may reflect on the suitability of the instrument itself for the purpose to which it was applied in the AIE project: cognitive growth among students in the arts-infused education groups may well have been significant but not along cognitive dimensions measured by the PIAT.

Furthermore, it is interesting that significant main effects for group membership were found for four of the six analyses of the Clover Park data (control group means exceeding experimental group means) while no such findings of significance were obtained with the St. Louis data. Interpretation of this inconsistency is difficult. Whether traditional curriculum outcomes are stronger in the Clover Park district or whether arts-

Table 2. Mean¹ Posttest PIAT Subtest and
Total Scores: St. Louis

Score	Group Membership				Sex			
	Experimental	Control	F	p	Male	Female	F	p
Math ¹	26.81	28.97	2.10	.149	27.83	28.05	.02	.895
Reading Recognition	32.00	31.98	.00	.988	31.57	32.58	.38	.541
Reading Cognition	29.56	29.23	.05	.827	29.41	29.36	.00	.969
Spelling	30.69	31.56	.34	.558	30.10	32.57	2.75	.099
General Information	26.70	27.31	.15	.698	28.10	25.50	2.74	.100
Total	154.54	149.45		.621	154.75	148.04	.43	.515

N=73

N=77

N=87

N=63

¹ Adjusted for covariates

Table 3. Mean¹ Posttest PIAT Subtest and Total Scores: All Sites

Score	Group Membership						Sex					
	Experimental		Control		<u>F</u>	<u>p</u>	Male		Female		<u>F</u>	<u>p</u>
	<u>X̄</u>	N	<u>X̄</u>	N			<u>X̄</u>	N	<u>X̄</u>	N		
Math	24.80	186	28.66	149	23.27	.001*	26.90	212	25.72	123	1.22	.270
Reading Recognition	28.85	186	28.43	149	.55	.458	27.96	212	29.72	123	2.23	.137
Reading Cognition	26.70	186	27.26	149	.89	.347	26.84	212	27.48	123	.36	.552
Spelling	28.37	181	28.75	148	.42	.517	27.21	208	30.62	121	7.10	.008*
General Information	24.38	181	25.42	148	1.27	.261	25.92	208	23.27	121	6.60	.011*
Total	137.60	181	139.42	148	.18	.673	137.74	208	139.46	121	.28	.597

¹ Adjusted for covariates
* Significance

infused curriculum outcomes are stronger in the St. Louis district cannot be determined. The possibility also exists that some unknown and unintended systematic bias in the assignment of Clover Park students to experimental and control groups influenced the results of that site's and the combined site data.

The several findings of a main effect for sex of student are generally consistent with previous research. In general, females tend to score higher on tests of spelling skills, while males tend to score higher in math and science. The general information subtest's emphasis on science and sports content may explain the significantly higher scores by males in the Clover Park site and the combined sites.

Checklist for Parents and Teachers:

Artistic Growth in Children--Teacher Data

Data from teachers who completed this form, administered three times during the course of the project (December, March, and June) were subjected to trend analysis. Trend analysis enabled the documentation of teachers' perceptions of students' progress in the course of the project.

The checklist provided 29 dependent variables for analysis: five skill dimensions within each of four art forms (20 variables); four art forms, summing over five skill dimensions (4 variables); and five skill dimensions, summing over four art forms (5 variables). Responses were coded as follows: Very Weak - 1; Weak - 2; Average - 3; Strong - 4; Very Strong -5.

Analyses were conducted for individual site and combined site data.

Results

Tables 4,5,6, and 7 present the results of trend analyses for the combined sites, Clover Park, St. Louis, and New Haven, respectively. For the combined site data, a significant increasing linear trend in teachers' ratings of students' artistic growth was demonstrated for virtually all of the 29 dependent variables. The same consistent pattern was found for the Clover Park and St. Louis sites. For the New Haven site, however, only 14 of the 29 analyses indicated a significant linear trend in teachers' ratings of artistic growth.

Table 4. Analyses of Trends in Mean Teacher Ratings of Artistic Growth in Children: All Sites

Variable	Means			N	F	p
	Dec.	March	June			
Visual art	12.71	13.37	15.50	139	106.94	<.001*
Awareness	2.87	3.00	3.34	184	69.95	<.001*
Imitation	2.71	2.90	3.32	174	99.59	<.001*
Self-initiation	2.60	2.69	3.11	163	5.247	<.001*
Skill development	2.24	2.40	2.85	145	72.84	<.001*
Critical judgment	2.15	2.33	2.69	139	63.33	<.001*
Music	12.75	13.31	15.11	138	68.26	<.001*
Awareness	3.00	3.19	3.49	183	87.94	<.001*
Imitation	2.88	3.00	3.32	182	53.79	<.001*
Self-initiation	2.59	2.69	3.05	163	39.11	<.001*
Skill development	2.23	2.37	2.72	145	51.81	<.001*
Critical judgment	2.08	2.30	2.55	139	41.93	<.001*
Drama	12.09	13.27	14.48	140	69.48	<.001*
Awareness	2.78	3.04	3.28	185	75.46	<.001*
Imitation	2.74	2.94	3.13	175	36.59	<.001*
Self-initiation	2.39	2.63	2.93	164	58.24	<.001*
Skill development	2.12	2.40	2.65	146	53.84	<.001*
Critical judgment	2.01	2.37	2.53	141	52.11	<.001*
Dance	11.90	12.47	14.08	135	59.51	<.001*
Awareness	2.84	2.94	3.27	180	53.35	<.001*
Imitation	2.69	2.87	3.13	178	47.69	<.001*
Self-initiation	2.37	2.49	2.84	159	46.05	<.001*
Skill development	2.06	2.24	2.55	141	50.71	<.001*
Critical judgment	2.01	2.18	2.41	136	36.10	<.001*
Awareness	11.54	12.20	13.38	178	119.18	<.001*
Imitation	11.01	11.62	12.81	166	94.70	<.001*
Self-initiation	10.05	10.54	12.00	153	79.46	<.001*
Skill development	8.71	9.45	10.76	137	87.19	<.001*
Critical judgment	8.24	9.18	10.18	131	66.79	<.001*

*Significant

Table 5. Analyses of Trends in Mean Teacher Ratings
of Artistic Growth in Children: Clover Park

Variable	Means			N	F	p
	Dec.	March	June			
Visual art	12.06	12.89	15.47	53	57.15	<.001*
Awareness	2.87	3.02	3.32	54	23.15	<.001*
Imitation	2.59	2.80	3.41	54	48.35	<.001*
Self-initiation	2.59	2.60	3.17	53	17.82	<.001*
Skill development	2.08	2.30	2.98	53	59.92	<.001*
Critical judgment	1.94	2.13	2.60	53	37.11	<.001*
Music	12.44	12.21	14.71	52	21.62	<.001*
Awareness	2.93	2.94	3.33	54	22.59	<.001*
Imitation	2.74	2.60	3.21	53	16.77	<.001*
Self-initiation	2.62	2.36	2.93	53	4.94	<.05*
Skill development	2.41	2.22	2.80	54	20.09	<.001*
Critical judgment	1.96	2.11	2.53	53	23.52	<.001*
Drama	11.44	12.11	14.02	54	30.35	<.001*
Awareness	2.84	2.78	3.15	55	10.22	<.01*
Imitation	2.53	2.58	2.96	55	16.16	<.001*
Self-initiation	2.22	2.40	2.86	55	27.28	<.001*
Skill development	1.94	2.19	2.57	54	27.20	<.001*
Critical judgment	1.86	2.13	2.47	55	30.80	<.001*
Dance	11.16	11.72	14.06	50	32.47	<.001*
Awareness	2.82	2.78	3.16	51	8.39	<.01*
Imitation	2.41	2.55	3.04	51	24.94	<.001*
Self-initiation	2.22	2.26	2.78	51	18.00	<.001*
Skill development	1.88	2.08	2.61	51	32.35	<.001*
Critical judgment	1.86	2.02	2.40	50	20.83	<.001*
Awareness	11.52	11.48	12.90	50	27.10	<.001*
Imitation	10.33	10.51	12.59	49	44.01	<.001*
Self-initiation	9.58	9.54	11.75	48	29.80	<.001*
Skill development	8.10	8.73	10.92	48	50.17	<.001*
Critical judgment	7.48	8.29	9.94	48	40.75	<.001*

* Significant

Table 6. Analyses of Trends in Mean Teacher Ratings
of Artistic Growth in Children: St. Louis

Variable	Means			N	F	
	Dec.	March	June			
Visual art	13.79	14.55	16.52	71	53.23	< .001*
Awareness	2.90	3.11	3.49	71	45.08	< .001*
Imitation	2.90	3.16	3.49	71	36.17	< .001*
Self-initiation	2.92	3.00	3.42	71	25.88	< .001*
Skill development	2.55	2.65	3.04	71	25.68	< .001*
Critical judgment	2.52	2.63	3.07	71	32.52	< .001*
Music	13.51	14.80	16.41	71	59.41	< .001*
Awareness	2.99	3.35	3.66	71	60.08	< .001*
Imitation	2.97	3.23	3.51	71	31.95	< .001*
Self-initiation	2.78	3.04	3.44	71	40.25	< .001*
Skill development	2.41	2.61	2.93	71	34.30	< .001*
Critical judgment	2.37	2.58	2.87	71	25.85	< .001*
Drama	13.19	14.79	15.86	70	50.16	< .001*
Awareness	2.75	3.24	3.42	71	65.87	< .001*
Imitation	2.92	3.24	3.38	71	22.71	< .001*
Self-initiation	2.69	2.94	3.18	71	23.19	< .001*
Skill development	2.44	2.72	3.00	71	31.88	< .001*
Critical judgment	2.37	2.67	2.91	70	31.66	< .001*
Dance	13.09	13.90	15.23	69	33.55	< .001*
Awareness	2.84	3.06	3.37	70	36.68	< .001*
Imitation	2.84	3.04	3.28	69	18.36	< .001*
Self-initiation	2.70	2.83	3.17	70	25.71	< .001*
Skill development	2.36	2.51	2.74	70	20.29	< .001*
Critical judgment	2.34	2.47	2.73	70	15.38	< .001*
Awareness	11.51	12.81	13.97	70	45.78	< .001*
Imitation	11.67	12.70	13.70	69	52.22	< .001*
Self-initiation	11.11	11.87	13.27	70	53.04	< .001*
Skill development	9.77	10.53	11.74	70	51.11	< .001*
Critical judgment	9.58	10.35	11.55	69	38.10	< .001*

*Significant

Table 7. Analyses of Trends in Mean Teacher Ratings of Artistic Growth in Children: New Haven

Variable	Means			N	F	p
	Dec.	March	June			
Visual art	9.93	9.47	10.73	15	1.51	n.s.
Awareness	2.83	2.83	3.19	59	10.02	< .01*
Imitation	2.57	2.65	2.98	49	17.82	< .001*
Self-initiation	2.03	2.23	2.46	39	9.50	< .01*
Skill development	1.62	1.81	1.76	21	.89	n.s.
Critical judgment	1.13	1.60	1.20	15	.20	n.s.
Music	10.27	10.07	10.33	15	.01	n.s.
Awareness	3.07	3.22	3.43	58	13.48	< .001*
Imitation	2.90	3.07	3.21	58	8.85	< .01*
Self-initiation	2.21	2.49	2.51	39	4.73	< .05*
Skill development	1.60	1.90	1.80	20	1.56	n.s.
Critical judgment	1.33	1.60	1.07	15	.12	n.s.
Drama	9.44	10.56	10.00	16	.32	n.s.
Awareness	2.76	3.05	3.22	59	16.13	< .001*
Imitation	2.74	2.92	2.96	49	2.91	n.s.
Self-initiation	2.08	2.40	2.55	38	9.04	< .01*
Skill development	1.52	1.86	1.67	21	.55	n.s.
Critical judgment	1.00	1.88	1.06	16	.09	n.s.
Dance	9.06	8.63	9.19	16	.03	n.s.
Awareness	2.86	2.95	3.25	59	13.31	< .001*
Imitation	2.76	2.95	3.03	58	7.01	< .01*
Self-initiation	1.95	2.18	2.29	38	5.19	< .05*
Skill development	1.50	1.70	1.70	20	1.50	n.s.
Critical judgment	1.00	1.44	1.06	16	.33	n.s.
Awareness	11.57	12.07	13.07	58	20.71	< .001*
Imitation	10.75	11.21	11.75	48	8.98	< .01*
Self-initiation	8.54	9.26	9.80	35	6.15	< .05*
Skill development	6.32	7.26	6.74	19	.52	n.s.
Critical judgment	4.21	6.50	4.29	14	.20	n.s.

*Significant

Discussion

On the whole, the data on teachers' evaluations of their students' growth in competency in the arts are very encouraging. For the Clover Park and St. Louis sites and for the combined sites, teachers provided consistently increasing ratings of student competencies and skills. The somewhat contrary findings for New Haven lead one to question how the curriculum intervention was differently implemented at this site. In particular, where non-significance was demonstrated with the New Haven data, the general pattern of mean ratings was such that increases occurred from time point 1 to time point 2, but then decreases in mean ratings from time point 2 to time point 3 resulted. (Although sample sizes for the New Haven analyses were generally smaller than for other analyses, sample size in and of itself does not adequately account for the patterns leading to non-significant findings.) Project administrators may be able to use these findings to further explore how the New Haven component differed from the other components with regard to such factors as teacher qualities and attitudes, student characteristics, etc.

Checklist for Parents and Teachers: Artistic Growth in Children--St. Louis Parent Data

Parents at two of the participating AIE schools in St. Louis completed this checklist in December (pretest) and again in June (posttest). Data were used to evaluate any change in ratings of children's performance over the course of the project.

The checklist provided 29 dependent variables for analysis (see description under Teacher Data above). The t-test for dependent means was used to evaluate the significance of observed differences between pretest and posttest assessments of children's performance.

Results

Table 8 presents the results of analyses for the four art form scores. As shown, mean parent posttest ratings of their children's artistic level in music were significantly higher than mean pretest ratings.

An examination of scores on skill dimensions, summed over art forms (Table 9), indicates that children were rated significantly higher on self-initiation in June than they were rated in December.

Finally, as Table 10 shows, three significant differences

Table 8. Pretest-posttest Parent Ratings of Artistic Growth in Children: St. Louis.
Art Forms Summed over Skill Dimensions¹

Art Form	Means		<u>t</u>	<u>df</u>	<u>p</u>
	Dec.	June			
Visual art	14.47	15.73	1.96	29	.059
Music	15.75	17.11	2.49	27	.019*
Drama	14.41	15.48	1.63	28	.114
Dance	13.92	14.60	.91	24	.372

¹Awareness + imitation + self-initiation + skill development + critical judgment

*Significant

Table 9. Pretest-posttest Parent Ratings of Artistic Growth in Children: St. Louis.
Skill Dimensions Summed over Art Forms¹

Skill Dimension	Means		<u>t</u>	<u>df</u>	<u>p</u>
	Dec.	June			
Awareness	13.00	13.78	1.71	27	.098
Imitation	12.22	13.15	1.77	26	.088
Self-initiation	11.08	12.36	2.64	24	.014*
Skill development	10.62	11.50	1.92	25	.067
Critical judgment	11.50	11.85	.57	25	.572

¹Visual art + music + drama + dance

*Significant

Table 10. Pretest-posttest Parent Ratings of Artistic Growth in Children: St. Louis
Individual Skill Dimensions Within Art Forms

Individual Dimension	Means		<u>t</u>	<u>df</u>	<u>p</u>
	Dec.	June			
Visual art					
Awareness	3.07	3.30	1.76	29	.092
Imitation	2.90	3.29	1.99	30	.056
Self-initiation	2.80	3.10	1.96	29	.059
Skill development	2.73	2.90	.96	29	.344
Critical judgment	2.93	3.13	.90	29	.375
Music					
Awareness	3.66	3.83	.89	28	.378
Imitation	3.45	3.74	1.66	30	.107
Self-initiation	2.79	3.38	3.21	28	.003*
Skill development	2.63	3.03	2.56	29	.016*
Critical judgment	3.13	3.07	.40	29	.690
Drama					
Awareness	3.14	3.31	1.09	28	.283
Imitation	3.07	3.20	.75	29	.459
Self-initiation	2.66	3.10	2.45	28	.021*
Skill development	2.69	2.90	1.03	28	.312
Critical judgment	2.86	3.00	.70	28	.489
Dance					
Awareness	3.17	3.23	.37	29	.712
Imitation	3.00	3.04	.20	26	.839
Self-initiation	2.73	2.92	1.04	25	.306
Skill development	2.46	2.69	1.14	25	.265
Critical judgment	2.65	2.85	.93	25	.363

*Significant

were found when skill dimensions within art forms were analyzed individually. Mean posttest parent ratings of self-initiation and skill development in music and of self-initiation in drama were significantly higher than the corresponding mean pretest ratings.

Discussion

In general, mean posttest ratings of artistic growth in children exceeded mean pretest ratings. A number of the differences attained statistical significance, and several more (visual art, summed over skill dimensions, and imitation and self-initiation for visual art) were very close to attaining significance.

These outcomes provide an encouraging indication of the effectiveness of the curriculum intervention. The small but consistent improvements in ratings demonstrate the project's success in increasing student's competence and interest in the arts as perceived by parents.

Parent's Checklist for Artistic Interest and Growth: Clover Park Parent Data

The Parent's Checklist for Artistic Interest and Growth, administered to parents of students at Custer Elementary School, Clover Park, in the winter (pretest) and spring (posttest), provided a basis for evaluation of change in parents' perceptions of children's performance over the course of the project at that site.

Ratings on both interest and ability yielded 22 variables on each of these two dimensions: four art forms, summed over component skills, plus 18 component skills regarded individually. Interest responses were coded as follows: Dislike, Avoid - 1; Some Interest - 2; Definite Interest - 3. Ability responses were coded: Weak - 1; Average - 2; Strong - 3.

The t-test for dependent means was used to determine the statistical significance of observed differences between winter and spring evaluations of children's performance.

Results

Outcomes of the analysis of pretest-posttest parent evaluations of interest and ability for the four art forms are presented in Table 11. There were no significant differences between mean

pretest and posttest evaluations of ability or interest.

When the component skills were regarded individually, however, significant differences did emerge (Table 12). Mean posttest evaluations of children's interest in painting, drawing, and puppetry were all significantly higher than mean pretest evaluations of these skills. In addition, mean posttest evaluations of ability in textiles and freestyle dance were significantly higher than mean pretest evaluations of these skills.

Discussion

From the above findings, one concludes that parents did observe increases in their children's interest and ability on a few of the evaluated art areas. However, the extremely low completion rate (approximately 15 percent of the Clover Park parents) for this checklist form discourages extensive generalization of these findings.

Parent-Teacher Correlational Data

Using the St. Louis data from the Checklist for Parents and Teachers: Artistic Growth in Children, summative scores were calculated for pretest (December) and posttest (June) ratings of children by both teachers and parents. Correlations between parent and teacher total ratings were then computed for both pretest and posttest correlations and tested for significance to determine whether the arts-infused curriculum resulted in a convergence of parents' and teachers' evaluations of children's artistic level.

(A similar analysis was intended for the Clover Park parent and teacher data. However, the extremely low return rate on parent forms and the large number of incomplete forms that were returned precluded meaningful analysis.)

Results

The pretest correlation between parent and teacher ratings of children's artistic level was .60 ($N=39$; $p=.001$) while the corresponding posttest correlation was .36 ($N=30$; $p=.026$). The test for significance of the difference between pretest and posttest correlation coefficients revealed that the above difference could have occurred by chance ($Z=1.24$, $p<.05$).

Table 11. Pretest-posttest Parent Ratings of Child's Interest and Ability in the Arts; Clover Park.
Art Forms Summed over Component Skills

Art Form	Interest					Ability				
	Means		<u>t</u>	<u>df</u>	<u>p</u>	Means		<u>t</u>	<u>df</u>	<u>p</u>
	Winter	Spring				Winter	Spring			
Art	13.25	14.75	1.26	3	.297	9.25	11.75	1.89	3	.155
Dance/Movement	6.20	6.00	.21	4	.847	3.80	4.40	1.50	4	.208
Drama	10.20	11.26	1.29	4	.266	7.40	8.60	1.39	4	.235
Music	13.40	14.46	1.41	4	.230	10.60	12.20	1.73	4	.160

Table 12. Pretest-posttest Parent Ratings of Child's Interest and Ability in the Arts: Clover Park.
Individual Component Skills

Art Form	Interest					Ability				
	Means		<u>t</u>	<u>df</u>	<u>p</u>	Means		<u>t</u>	<u>df</u>	<u>p</u>
	Winter	Spring				Winter	Spring			
Art										
Painting	2.38	2.84	3.21	12	.008*	1.54	1.82	1.94	10	.082
Drawing	2.62	2.92	2.31	12	.040*	1.80	1.80	.00	9	1.000
Crafts	2.60	2.80	1.00	9	.343	1.82	2.18	1.17	10	.267
Textiles	2.43	2.71	1.55	6	.172	1.38	2.38	3.74	7	.007*
Pottery	2.40	2.80	1.63	4	.178	1.75	2.50	1.57	3	.215
Dance/Movement										
Formal	1.71	1.57	.42	6	.689	1.33	1.67	.54	5	.611
Freestyle	2.40	2.20	1.00	9	.343	1.33	1.89	2.29	8	.051
Social	2.00	2.20	.53	4	.621	1.33	1.67	1.00	5	.363
Drama										
Make-believe	2.54	2.63	.56	10	.588	1.91	2.09	.80	10	.441
Storytelling	2.45	2.73	1.94	10	.080	1.82	2.18	2.39	10	.038*
Puppetry	2.45	2.91	2.89	10	.016*	1.75	2.09	1.79	10	.104
Plays	2.20	2.60	1.63	4	.178	1.80	1.80	.00	4	1.000
Music										
Instrumental	2.38	2.38	.00	7	1.000	1.50	1.62	1.00	7	.351
Vocal	2.17	2.58	2.16	11	.054	1.92	2.33	1.82	11	.096
Religious	2.00	2.28	1.55	6	.172	2.28	2.28	.00	6	1.000
Popular	2.44	2.55	.55	8	.594	1.89	2.33	1.51	8	.169
Folk	2.43	2.43	.00	6	1.000	1.86	2.28	1.44	6	.200
Ethnic	2.16	2.50	1.58	5	.175	1.66	1.83	.54	5	.611

*Significant

Discussion

The hypothesis that parent and teacher evaluations of children's artistic levels would converge over the course of the project was not supported. Apparently, at least as these data reveal, parents and teachers perceive different aspects of a child's attitudes and behaviors, and thus their ratings differ. It must also be noted that the data for the correlations were limited to those children whose parents returned the checklist forms, and this situation alone may have been a biasing factor.

Arts Survey

The Arts Survey form was administered to participating AIE teachers at the beginning and at the close of the project. From the form, a score representing teacher interest in the arts was obtained by summing over teacher self-ratings on 10 art area scales. Ratings were coded as follows: Dislike, Avoid -1; Little or No Interest - 2; Some Interest - 3; Definite Interest - 4; Very Important Interest - 5. The t-test for dependent means was used to evaluate the significance of the difference between pretest and posttest teacher self-ratings of interest in the arts.

A similar score for teacher assessments of art forms which they would feel comfortable teaching was obtained by summing over 12 art area scales. Individual scale ratings were coded: Very - 3; Moderately - 2; Little or no - 1. The t-test for dependent means was used to evaluate the significance of the difference between these pretest and posttest teacher comfort scores.

(A similar analysis of teacher self-perception of ability in art was intended. However, scales to measure this variable were not administered at the close of the project, and no analysis could be performed).

Results

Table 13 presents the results of the analyses of teacher interest and comfort scores. In both cases, the observed differences were in the desired direction, with posttest interest and comfort scores exceeding the corresponding pretest scores. However, the differences did not attain statistical significance.

Discussion

The small number of cases (N=23) for these analyses may well

Table 13. Pretest-posttest Teacher Self-ratings of Interest and Comfort in Teaching the Arts

Variable	Means		<u>t</u>	<u>df</u>	<u>p</u>
	Pre	Post			
Interest	34.57	35.22	.66	22	.518
Comfort	19.87	21.96	1.96	22	.063

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have mitigated against a finding of significance, especially with regard to the analysis of teacher self-ratings of comfort in teaching the arts. Had the same pattern held and sample size been somewhat larger, the outcome of this analysis would have been statistically significant. As is, the increase in teacher comfort is at least suggestive of the project's overall impact on those directly responsible for imparting arts-infused content to students.

Teacher-Student Correlational Data

In an effort to delineate components of successful implementation of the arts-infused curriculum, two sets of correlational analyses were performed:

1. The relationships between posttest teacher interest in arts and mean posttest PIAT subtest and total scores for classrooms were tested for significance.
2. The relationship between posttest teacher evaluations of comfort in teaching art forms and mean posttest PIAT subtest and total scores for classrooms were tested for significance.

(A similar analysis of the relationship between teacher ability and student PIAT scores was not performed due to unavailability of posttest teacher self-assessments of ability in art.)

Results

Table 14 presents the results of teacher-student correlational analyses. As is shown, teacher interest scores did not account for a significant amount of variance in any of the student PIAT scores. For the analyses involving teacher comfort scores, all of the relationships were in the negative direction with two correlation coefficients (spelling with teacher comfort and general information with teacher comfort) attaining significance.

Discussion

These data again partially support the notion that the PIAT may not be measuring the specific cognitive growth intended by the AIE project. First, teacher interest in the arts was not a significant factor in determining student achievement. The negative correlations between PIAT scores and teacher comfort

Table 14. Matrix of Correlations Between Teacher Self-ratings
and Mean PIAT Scores for Classrooms

Student Measure	Teacher Measure	
	Interest	Comfort
Math	.14 (N=21)	-.34 (N=21)
Reading Recognition	.25 (N=21)	-.29 (N=21)
Reading Cognition	.25 (N=21)	-.30 (N=21)
Spelling	.15 (N=21)	-.39* (N=21)
General Information	.13 (N=20)	-.43* (N=20)
/ Total	.17 (N=21)	-.37* (N=21)

1 Adjusted for covariates
* Significant

suggest that the more discomfort in teaching the arts that the teacher felt, the higher the students scored on the PIAT. It is conceivable that those teachers who felt uncomfortable with the arts-infused curriculum tended to revert to the more traditional curricula; and thus their students demonstrated a higher level of achievement on the traditional PIAT measures.

Conclusions and Implications

The findings of nonsignificant differences between experimental and control group mean PIAT scores (and the findings of significance in the opposite direction) lead to any one of several explanations. One must, as always, question the reliability of the instrument for use with the population of this project. Given that the instrument is acceptably reliable, the issue of what is being measured must be addressed. As previously noted, it may be somewhat unrealistic to expect students in the novel arts-infused curriculum to demonstrate a higher level of achievement in such basic skills as math, reading, and spelling that students in the more traditional curricula where these skills are directly taught. In other words, the PIAT measures traditional achievement areas, and one might very well expect that a traditional program would produce students who attain higher scores on this instrument.

All of this is not to say that the students in the arts-infused curriculum did not make cognitive gains. The point is that gains were not demonstrated in those areas measured by the PIAT. Moreover, the results of trend analyses of teacher ratings of artistic growth in children are extremely supportive of student gain in competencies related to the arts. It seems reasonable to view these competencies (awareness, imitation, self-initiation, skill development, and critical judgment) as indicators of "cognitive" growth in and of themselves, albeit not the most restrictive and traditional indicators. In the broadest sense, the AIE project may be viewed as directed more toward creative thinking than toward instilling a culturally-prescribed body of knowledge. If this is so, the use of the PIAT may be an unfair test of the project's success, and the teacher observational data may be the more appropriate yardstick.

It seems advisable to begin to carefully reconsider exactly what student attitudes/behaviors/skills are desired as outcomes of the art-infused curriculum and to develop instruments which assess these outcome variables. To this end, both persons with expertise in the arts-infused curriculum content and persons with expertise in instrument development should be involved.

At the same time, if the teaching of traditional skills (math, spelling, etc.) is viewed as a major goal, the curriculum might be re-examined with the purpose of strengthening the content in these areas.

With regard to parent data collected at the Clover Park and St. Louis sites, it is unfortunate that the return rate for the two forms was so low. Nonetheless, taken with teacher ratings, the results of parent data analyses are further suggestive of observable change in students.

It seems important that future arts-infused programs continue to measure growth in children both in the classroom (as perceived by teachers) and out of the classroom (as perceived by parents). Furthermore, attention should be given to the general format of and construction of items to be incorporated into instruments for collecting parent data. For this year's project, the parent forms may have suffered from two deficiencies; (a) The construction of the items (especially for the Clover Park form) probably contributed to the problem of incomplete data. That is, it would be difficult for parents to rate ability and interest in pottery if the parents have never observed the child working with pottery. (b) Especially with the St. Louis checklist, parents may have been unable to adequately rate certain skill dimensions ("self-initiation" ability or "skill development") simply because the definitions of these variables were unclear. Whereas teachers were familiar with the specific meanings of the various items on the checklist, parents were probably not, and parents therefore placed whatever interpretation on them they wished or merely chose not to respond. Future parent instruments should and certainly can correct these problems.

In summary, the year two outcomes of the AIE project would argue for a continuation of an arts-infused educational model for handicapped children with two major considerations: (a) The emphasis of the project on cognitive gain should be reassessed with a serious attempt to clarify the meaning of this construct and to question the merit of defining cognitive gains in traditional terms for a program which by its very nature is innovative and nontraditional. (b) The instruments used not only for student data but also for teacher and parent data should be re-examined and revised where necessary.

REPORT NUMBER TWO, AIE PROJECT-YEAR TWO

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Peabody Individual Achievement Test Results

Peabody Individual Achievement Test data (PIAT) from experimental (classrooms using the arts-infused curriculum) and control groups were collected in November and again in May of the 1977-1978 school year. These data were collected from 40 classrooms, a total of 392 special education students, at three sites: Clover Park, Washington; New Haven, Connecticut; and St. Louis, Missouri.

The PIAT was selected as the tool for evaluating the impact of the curriculum intervention on students' cognitive growth. The PIAT uses five subtests (math, reading recognition, reading cognition, spelling and general information) and a total score obtained as the sum of the scores on the subtests. In addition to the test score data, other information was collected including IQ and age.

An analysis of the pre-test data comparing the control and experimental groups produced surprising results. The control group students scored significantly higher than the experimental students on every measure. In fact, in terms of standard scores (mean of 100 and standard deviation of 15) the control group mean was at least one-half of one standard deviation (more than 7.5 standard score points) above the experimental group on all six PIAT pre-test measures.

It became obvious that no amount of statistical compensation could overcome these large initial differences. Clearly, the groups were mismatched and experimental-control group designs could not fairly evaluate the efficacy of the arts-infused curriculum.

As an alternative, a norm-referenced approach was taken to assess the effectiveness of the arts-infused curriculum on basic academic skills. Based on each student's age at the time of testing, the raw scores were converted to standard scores (with a mean of 100 and a standard deviation of 15) using the procedures specified in the PIAT manual. From there the standard scores were converted to percentiles.

Table I shows the standard pre and post PIAT scores by site

and for the entire special education population experiencing the arts-infused curriculum. Table II shows the same data converted to percentile ranks. Clearly, the project serves a severely handicapped population.

The handicapped children experiencing the arts infused curriculum showed consistent gains in all areas at all sites with only one exception, in math at New Haven where maintenance occurred. While gains did consistently occur, their magnitude was small; averaging four standard score points and a percentile rank gain of four.

By subject area (subtest) the gains were fairly uniform -- see the right hand column of Tables I and II.

By site (Tables I and II bottom row), the St. Louis students showed the highest scores and the largest gains. The New Haven students appeared to be the most severely handicapped with the lowest scores and the smallest gains.

The major question remains: Is the arts-infused curriculum effective? Using the norm-referenced model, it is difficult to attribute these gains to the instructional procedure considering the research design, the relatively low scores of these handicapped students (regression toward the mean possibilities) and that the gains while consistent, were relatively small.

Within these limits, the fact remains that consistent academic progress was made by a relatively large group of handicapped students in a variety of settings experiencing an unusual curriculum approach. The curriculum approach of combining arts and academics seems to provide handicapped students with two advantages. First, their academic performances were slightly enhanced, as compared to the continued regression so often noted with severely handicapped students. And secondly, they were provided with the opportunity of experiencing and refining a variety of arts skills, as demonstrated in the next sections of this evaluation.

While the norm-referenced model cannot clearly answer the question about the efficacy of the arts-infused curriculum for academics, the data do encourage its continued refinement, application and evaluation.

TABLE 1

PIAT STANDARD SCORES

		Clover Park		New Haven		St. Louis		Total	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
Math	\bar{X}	71	73	53	53	70	75	65	67
	SD	16	13	14	14	19	20	18	19
	N	72	55	63	60	78	76	213	191
Reading Recognition	\bar{X}	74	80	54	55	80	84	70	74
	SD	10	11	14	15	18	19	18	20
	N	72	55	64	58	77	75	213	188
Reading Cognition	\bar{X}	75	79	56	57	79	82	71	74
	SD	11	9	13	14	16	19	17	19
	N	69	55	64	56	77	76	210	187
Spelling	\bar{X}	71	74	48	52	76	79	66	69
	SD	14	12	16	19	19	21	20	21
	N	71	55	59	60	74	76	204	191
General Information	\bar{X}	79	83	43	46	78	82	69	72
	SD	12	12	16	19	17	17	22	23
	N	72	55	54	51	75	75	201	181
Total	\bar{X}	69	74	41	44	71	79	62	66
	SD	10	10	16	17	19	28	21	26
	N	72	55	64	60	78	76	214	191

TABLE II
FIAT PERCENTILE RANKS

	Clover Park Pre Post	New Haven Pre Post	St. Louis Pre Post	Total Pre Post
Math	9 9	2 2	10 16	8 10
Reading Recognition	8 14	2 3	19 23	10 14
Reading Cognition	9 11	2 3	16 22	10 13
Spelling	7 9	2 4	16 20	9 12
General Information	13 19	1 2	16 19	11 14
Total	5 8	1 2	12 19	6 10

ARTS FOR LEARNING GUIDE ACTIVITY EVALUATION

YEAR TWO

In addition to collecting student data during the second year, a major area of concern was the refinement and evaluation of the Arts for Learning Model and Guide. Teachers in the three sites rated the activities they used throughout the year according to its usefulness. They indicated which activities were highly useful, useful, or not useful by basic learning abilities and levels of aesthetic development. Teachers also used the same criteria to rate the activities according to art form only.

The following interpretations can be made from analyzing the data:

Teachers used the drama/theatre lessons most frequently (543 times), followed by visual arts (525 times), dance/movement (421 times) and music (418 times). While these figures indicate that drama/theatre was the art form used most often, the visual arts lessons were rated as highly useful more than the drama/theatre lessons.

The learning abilities taught most often were perceptual skills (652 lessons recorded). Three-hundred fifty teacher ratings found the visual arts, dance/movement, drama/theatre and music lessons to be highly useful for perceptual skill development. Conceptual skills were rated 301 times and language development was noted 272 times. Sensory integration skills were noted least in the visual arts, dance/movement, drama/theatre and music lessons. There were no dance/movement lessons designated for teaching gross motor, conceptual or social skills.

In the areas of aesthetic development self-initiation was the level noted most often in the visual arts, dance/movement, drama/theatre, and music activities. Six-hundred sixty-nine (669) lessons were taught and evaluated for self-initiation. The level of awareness was also noted for effectiveness. Four hundred eighty lessons (480) emphasizing awareness were taught and evaluated. Only eighty-six (86) lessons with critical judgment were used.

As indicated in the hierarchical structure of aesthetic development, critical judgment is reached after a thorough experience with awareness, imitation, self-initiation and skill development. As the curriculum model is used, possibly a higher level of critical judgment may be reached.

In conclusion, visual arts, and drama/theatre were the art forms indicated as most commonly used, the perceptual skills were most emphasized and the level of self-initiation was noted most often.

The following tables and summary conclusions expand each conclusion previously stated.

Summary by Basic Learning Abilities

The perceptual skills (655) were taught most in the four art forms. Following perceptual skills, conceptual skills (301) and language development (272) were taught and evaluated. A most encouraging finding is that 350 teacher ratings found visual arts, dance/movement, drama/theatre, and music lessons to be highly useful for teaching perceptual skills.

There were no dance/movement lessons designated for teaching gross motor, conceptual or social skills. Sensory motor integration skills was least rated in visual arts, dance/movement, drama/theatre and music lessons (179).

In conclusion, 1,864 teacher ratings of the six learning abilities were taught within art, movement, drama and music lessons. Table 1 contains the data from which the conclusions were drawn.

Summary by Levels of Development

Self-initiation (669) and awareness (469) were the two levels noted most often. The level of self-initiation was most effective in visual art, drama/theatre, and music. These findings yield a positive picture; namely, the lessons requiring self-initiation were most successful.

The fact that the level of awareness was increased through visual arts, dance/movement, drama/theatre and music indicates that the design of the lessons were very helpful to teachers and students.

Only 88 teachers used lessons stressing critical judgment and 51 of these teachers found the lessons useful.

TABLE 1 SUMMARY BY BASIC LEARNING ABILITY

		GROSS MOTOR			SENSORY			PERCEPTUAL			LANGUAGE			CONCEPTUAL			SOCIAL			TOTAL
		H	U	N	H	U	N	H	U	N	H	U	N	H	U	N	H	U	N	
ART	C.P.	22	17	0	14	11	0	20	26	1	10	8	0	6	8	0	16	20	0	179
	ST.L.	19	16	0	12	8	0	20	14	1	9	10	0	15	5	0	20	11	0	160
	N.H.	35	5	1	23	10	0	20	14	1	6	9	0	24	8	0	19	4	0	179
Subtotal		76	38	1	49	29	0	60	54	3	25	27	0	45	21	0	55	35	0	518
Subtotal Totals		--115--			--78--			--117--			--52--			--66--			--90--			518
MOVEMENT	C.P.	0	0	0	5	14	0	38	43	1	7	19	1	0	0	0	0	0	0	128
	ST.L.	0	0	0	13	4	1	17	25	9	23	21	2	0	0	0	0	0	0	115
	N.H.	0	0	0	3	9	1	65	20	1	16	16	2	0	0	0	0	0	0	133
Subtotal		0	0	0	21	27	2	120	88	11	46	56	5	0	0	0	0	0	0	376
Subtotal Totals		--0--			--50--			--219--			--107--			--0--			--0--			376
-191- DRAMA	C.P.	4	7	1	2	11	0	32	37	1	8	16	1	21	19	0	15	25	0	200
	ST.L.	3	4	0	4	4	0	16	16	3	11	20	2	23	23	0	14	11	3	157
	N.H.	0	6	0	6	1	0	53	10	1	12	20	0	31	13	0	28	12	2	195
Subtotal		7	17	1	12	16	0	101	63	5	31	56	3	75	55	0	57	48	5	552
Subtotal Totals		--25--			--28--			--169--			--90--			--130--			--110--			552
MUSIC	C.P.	19	18	0	10	7	0	14	39	1	2	6	1	12	17	1	3	10	0	159
	ST.L.	12	9	1	1	5	0	19	22	1	5	2	3	17	8	2	2	7	0	116
	N.H.	20	9	1	0	0	0	36	15	3	2	0	3	36	11	1	4	2	0	143
Subtotal		51	36	2	11	12	0	69	76	5	9	7	7	65	36	4	9	19	0	418
Subtotal Totals		--89--			--23--			--150--			--23--			--105--			--28--			418
Total		134	91	4	93	84	2	350	281	24	111	146	15	185	112	4	121	102	5	1,864
		--220--			--179--			--655--			--272--			--301--			--228--			1,864

In conclusion, self-initiation was the most effective level and critical judgment was the least effective, mainly because it was not used as frequently. Table 2 contains the data from which these conclusions are drawn.

Summary by Art Form

Of the four art forms, drama/theatre (542) was most popular with art (524) following closely. A closer look at the chart reveals that 314 art lessons compared to 280 drama/theatre lessons were rated as highly useful. Thus, even though drama/theatre was used more often, more visual art lessons were noted as highly useful.

Four-hundred seventeen (417) movement/dance lessons were rated; 198 rated as highly useful, 195 as useful and 23 not useful. These figures indicate a successful movement/dance program.

Music was used the least (only 328 times). One-hundred fourteen (114) teacher ratings found the lessons highly useful and 18 noted the lessons as not useful. These low rating may be due to the following considerations: teachers' inexperience with music curriculum methods, students' response to the lessons and/or the music lesson itself.

In conclusion, art and drama/theatre lessons were most utilized and rated most useful. Table 3 presents the data from which the above conclusions were drawn.

TABLE 2 SUMMARY BY LEVELS OF DEVELOPMENT

		AWARENESS			IMITATION			SELF IMITATION			SKILL DEVELOPMENT			CRITICAL JUDGEMENT			TOTAL
		H	U	N	H	U	N	H	U	N	H	U	N	H	U	N	
ART	C.P.	12	18	0	4	5	0	45	46	1	10	9	0	1	3	0	154
	ST.L.	17	12	0	8	5	0	24	1		1	2	0	3	8	0	131
	N.H.	41	18	0	15	6	1	23	1		1	1	0	3	2	0	165
Column Totals		70	48	0	27	16	1	148	93	3	12	12	0	7	13	0	450
Subtotals		--118--			--44--			--244--			--24--			--20--			450
MOVEMENT	C.P.	5	21	0	3	7	0	4	19	0	19	18	2	10	14	1	123
	ST.L.	8	13	2	4	4	0	9	11	5	20	14	2	2	7	3	104
	N.H.	44	17	1	1	4	1	16	14	0	17	15	2	8	3	0	143
Column Totals		57	51	3	8	15	1	29	44	5	56	47	6	20	24	4	370
Subtotals		--111--			--24--			--78--			--109--			--48--			370
DRAMA	C.P.	23	18	2	17	24	0	27	39	1	21	39	1	1	1	0	214
	ST.L.	19	23	3	13	13	0	25	31	3	14	13	1	1	1	0	166
	N.H.	24	21	0	32	14	0	44	22	1	35	7	1	1	1	0	203
Column Totals		66	62	5	62	51	0	96	92	5	70	59	3	3	3	0	577
Subtotals		--133--			--113--			--193--			--132--			--6--			577

TABLE 2 SUMMARY BY LEVELS OF DEVELOPMENT

		AWARENESS			IMITATION			SELF IMITATION			SKILL DEVELOPMENT			CRITICAL JUDGEMENT			TOTAL
		H	U	N	H	U	N	H	U	N	H	U	N	H	U	N	
MUSIC	C.P.	15	12	0	8	12	1	16	45	1	9	18	1	2	9	0	149
	ST.L.	14	13	0	7	9	2	22	25	1	11	7	4	0	0	0	115
	N.H.	38	13	2	18	4	0	30	12	2	11	6	3	1	2	0	142
Column Totals		67	38	2	33	25	3	68	82	4	31	31	8	3	11	0	406
Subtotals		--107--			--61--			--154--			--70--			--14--			406
Subtotals of Column Totals		260	199	10	130	107	5	341	311	17	169	149	17	33	51	4	1,803
TOTALS		-460-			-242-			-669-			-335-			-8-			1,803

TABLE 3 SUMMARY BY ART FORM

SITE	ART			MOVEMENT			DRAMA			MUSIC			TOTALS
	HIGHLY	USEFUL	NOT	HIGHLY	USEFUL	NOT	HIGHLY	USEFUL	NOT	HIGHLY	USEFUL	NOT	
CLOVER PARK	83	96	1	48	83	3	88	106	2	60	96	3	669
Sub Totals	--180--			--134--			--196--			--159--			
ST. LOUIS	100	51	1	55	55	16	68	76	11	54	53	7	547
Sub Totals	--152--			--126--			--155--			--114--			
NEW HAVEN	131	58	3	95	57	4	124	64	3	100	37	8	684
Sub Totals	--192--			--156--			--191--			--145--			
	314	205	5	198	195	23	280	246	16	114	196	18	1900
TOTALS	524			416			542			228			

PROCEDURES AND METHODOLOGY

YEAR THREE

The following is a description of the procedures for the selection of Project participants and the collection of data for Year Three of Project AIE.

Using the resources of the National Committee, Arts for the Handicapped, seventeen sites, representing a geographical spread of the United States, were invited to participate in the third year of Project AIE. Fourteen sites responded positively and were invited to attend an orientation meeting held in Washington D.C. at which they were provided with background information on the Project and its current goals and objectives. Persons attending from each site included an administrator who was to act as liaison between site participants, project investigators, and significant school administrators; and a master teacher with a background in both arts and special education who was to serve as support to teachers.

The administrators from each site selected teachers and classes to participate in the Project. Upon receipt of the names of selected teachers and the signing of a memorandum of understanding which outlined project expectations, NCAH sent each site the Arts for Learning Guides.

Special, arts and regular education teachers were included. Students, ages 3 to 26 years with physical and sensory disabilities, moderate to severe mental deficits, emotional and behavior disorders were involved as well as non handicapped children. The sites ranged from a state institution for the deaf and blind, to a therapeutic community arts center, an individual public elementary school, a city-wide public school system, public special education centers and a preschool Montessori program.

Each site conducted their own orientation meeting. Teachers completed questionnaires regarding their interest, comfort, and

experience with the arts and their education and training at the beginning of the Project. They completed activity evaluation forms, submitted them weekly to the Project Investigator and were encouraged to record lesson adaptations or extensions. In addition, at the end of the field testing period, teachers and administrators completed an evaluation of the Model and Guide which included an appraisal of its format and content and its overall effectiveness in fostering basic learning and aesthetic development.

During the Project year, workshops in the arts and special education were offered at each site. NCAH provided an arts resource leader to conduct these workshops based on the individual needs of each site. The overall goal of the workshop was to provide in-service training for teachers in using arts strategies to teach basic learning skills and aesthetic development to handicapped children.

The project investigator visited each site during the Project year. She observed teachers, conducted informal interviews with them and met with the administrative liaison. Continuous telephone and mail contact was maintained throughout the duration of the Project.

DESCRIPTION OF TEACHERS

YEAR THREE

The following describes the 189 teaching personnel of the AIE project at the 14 field sites.

ARLINGTON, TEXAS - ARLINGTON SCHOOLS

The Arlington, Texas site consisted of 10 teachers: 1 regular education, 9 special education, and 1 related service teacher. The 1 male and 9 female teachers had a mean age of 28.8 years with a 5.3 average years of teaching experience. More than half of the teachers had completed Masters work in Special Education. Formal arts background was most prevalent in art, crafts, art education, dance, instrument, and music education.

CELANTANO SCHOOL - NEW HAVEN, CONNECTICUT

Eight female, special education teachers participated in the project. These teachers had a mean age of 28.8 years, had taught an average of 2.8 years. Five teachers had Bachelors Degrees, and 3 had completed Masters Degrees. Teachers at this site had formal arts background in art, crafts, art education, dance, instruments, and music education.

CHATAUQUA COUNTY, NEW YORK BOARD OF COOPERATIVE EDUCATIONAL SERVICES (BOCES)

The 2 male and 4 female teachers at this site had a mean age of 30.5 years. Five of the teachers taught special education; the remaining 2 provided related services. The participants had taught an average of 7.0 years. Two teachers had Bachelors Degrees, 4 had completed Masters Degrees. Arts background spanned most areas of art, but centered on vocals, instruments, and music education.

CLOVER PARK SCHOOL DISTRICT, TACOMA, WASHINGTON

The 21 teachers at this site consisted of 6 regular and 17 special education teachers. The 1 male and 20 female teachers

had a mean age of 34.6 years. All personnel had Bachelors Degrees, 2 had Masters Degrees, and 2 had done post Masters work. Participants had taught an average of 5.9 years. The formal arts background of these teachers covered the entire spectrum, and was most prevalent in crafts, art education, instrument and music education.

GREAT FALLS, MONTANA - GREAT FALLS SCHOOLS

Eleven teachers (7 special education, 4 related services) participated in the project. The 2 male and 9 female teachers had a mean age of 35.6 years, and a mean experience teaching of 4.4 years. Four teachers had Masters Degrees, and 1 teacher had done post Masters work. The 7 special education teachers and 4 other teachers had formal arts background in arts education, dance, vocals, instruments, music education, and creative writing.

LOUISVILLE, KENTUCKY - URSULINE SCHOOL OF MUSIC

The 20 female teachers at this site had a mean age of 34.5 years. The majority were regular education teachers holding Bachelors Degrees, and had a mean teaching experience of 9.1 years. A high degree of arts background spanning all the arts was evident at this site.

LOS ANGELES, CALIFORNIA - LOS ANGELES UNIFIED SCHOOL DISTRICT

The 24 female teachers at the Los Angeles site had a mean age of 31.5 years. This site was composed of primarily special education teachers with a mean experience of 6.1 years. All teachers had Bachelors Degrees, 6 had Masters Degrees, and 3 had done post Masters work. Arts background centered heavily on art, crafts, art education, dance, instrument and music education; however, all areas of the arts were represented.

LUMBERG ELEMENTARY SCHOOL - EDGEWATER, COLORADO

This site was comprised of 19 teachers, 10 regular education, 6 special education and 3 other teachers. The 4 male and 15 female teachers had a mean age of 36.6 years and a mean experience of 4.3 years. More than half of the staff had completed Masters Degrees or had done post Masters work. Experience in the arts spanned nearly all areas; however, over half of these teachers had formal backgrounds in art education and music education.

MONTGOMERY COUNTY PUBLIC SCHOOLS, MARYLAND - INTERRELATED ARTS PROGRAM

Ten, primarily special education teachers, participated in the project. The 1 male and 9 female teachers had a mean age of 32.4 years, and mean teaching experience of 6.9 years. Fifty percent of the teachers held Masters Degrees, while another 20% have done post Masters work. Formal arts background was somewhat limited at this site, and centered around art education, dance, instrument, music education, and drama.

SARA'S CENTER - GREAT NECK, NEW YORK

This site consisted of 3 staff members representing administration, and related or support services. The 2 male and 1 female participants had a mean age of 22.3 years. All staff had Bachelors Degrees, and formal arts background in art, crafts, vocals, instrument, drama, and film.

SEATTLE, WASHINGTON - SEATTLE PUBLIC SCHOOLS

The Seattle site was comprised of 10 special education teachers (1 male, 9 female) with a mean age of 36.3 years. Six teachers held Bachelors Degrees, 3 held Masters Degrees, and 1 had done post Masters work. Teachers reported an average mean of 6.0 years of teaching experience; and formal arts background in art, crafts, art education, instrument, music education and film.

SPEED DEVELOPMENTAL CENTER - CHICAGO HEIGHTS, ILLINOIS

Twenty-one, primarily special education teachers, participated at this site. The 1 male and 20 female teachers had a mean age of 27.1 years, and had taught for a mean of 4.7 years. The majority of teachers held Bachelors Degrees, 3 had Masters Degrees and one had done post Masters work. Formal arts experiences centered heavily around art, crafts, art education, dance, vocals, music and music education. However, drama and creative writing were well represented.

SPOKANE, WASHINGTON - EDUCATIONAL SERVICE DISTRICT #101

Twelve (3 male and 9 female), primarily special education teachers, participated in the project. Eight teachers had Bachelors Degrees, 2 held Masters Degrees, and 2 teachers had taken post Masters work. Participants had a mean age of 32.3 years and had taught for a mean of 4.7 years. Formal Arts background consisted most heavily of art, art education, dance, and drama.

ST. LOUIS, MISSOURI - ST. LOUIS SPECIAL SCHOOL DISTRICT

The St. Louis site consisted of 14 female special education teachers with a mean age of 29.9 years. Nine teachers held Bachelors Degrees, 5 had Masters Degrees. Participating teachers had a mean of 5.4 years of experience and formal arts backgrounds primarily in art, crafts, dance, and instrument, although most art areas were represented.

OVERALL FIELD TEST PERSONNEL

The overall field testing included 189 participants from 71 separate schools. Eighteen male and 171 female teachers had a mean age of 31.5 years, and had taught an average of 5.6 years. Field sites consisted primarily of special education personnel (approximately 69%), with regular education and other teaching personnel represented to a lesser degree (approximately 17% and 12% respectively). In general, approximately 61% of the participants held Bachelors Degrees, 29% held Masters Degrees, and 9% had done post Masters work. Participants indicated formal arts training primarily in the following areas, although all arts areas were represented: art, crafts, art education, dance, vocals, instrument, and music education. Reader is referred to Chart A for summary of teacher data.

Chart A

AIE SITE TEACHING PERSONNEL

AIE SITE	#	TECHRS	MEAN AGE	SEX M F	EDUCATION			TEACHING POSITION			YRS TEACHING	ARTS BACKGROUND (FORMAL CLASSES OR LESSONS)																# SCHOOLS
					BA	MA	P. MA	REG	SPE	OTH		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
ARLINGTON, TEXAS	10		29.0	1 9	4	5	1	1	9	1	5.3	6	4	6	4	1	4	6	2	1	1	0	1	2	1	0	4	
CELANTANO, SCHOOL	8		28.8	0 8	5	3	0	0	8	0	2.8	3	4	4	6	2	3	4	0	2	1	1	1	0	0	0	1	
CHATAQUA CTY. BOCES	6		30.5	2 4	2	4	0	0	5	2	7.0	1	2	2	1	4	4	3	2	0	1	1	1	1	0	0	1	
CLOVER PARK SCHOOL DIST.	21		34.6	1 20	17	2	2	6	17	0	5.9	6	9	13	5	4	14	13	4	3	1	2	5	0	0	1	10	
GREAT FALLS, MONTANA	11		35.6	2 9	5	4	1	0	7	4	4.4	3	3	6	4	6	11	6	4	0	0	0	6	3	1	1	0	
LOUISVILLE, KENTUCKY	20		34.5	0 20	12	6	0	13	1	5	9.1	9	11	12	9	8	13	14	6	4	3	7	9	3	2	1	3	
LOS ANGELES, CA	24		31.5	0 24	15	6	3	2	23	1	6.1	13	12	15	13	8	19	15	4	3	0	2	4	2	1	2	16	
LUMBERG, ELEM. SCH.	19		36.6	4 15	8	6	5	10	6	3	4.3	7	8	11	7	4	9	10	6	4	1	5	4	3	2	0	1	
MONTGOMERY CTY. PUB. SCH.	10		32.4	1 9	3	5	2	1	8	2	6.9	2	2	4	5	3	5	5	4	1	0	1	1	0	1	1	0	
SARA'S CENTER	3		22.3	2 1	3	0	0	0	0	3	-	3	2	1	0	2	2	0	2	0	2	0	1	1	0	0	1	
SEATTLE, WA.	10		36.3	1 9	6	3	1	1	10	0	6.0	5	4	5	3	2	8	4	4	2	2	4	2	2	1	0	2	
SPEED DEVELOP. CENTER	21		27.1	1 20	17	3	1	1	18	2	4.7	9	11	18	11	7	11	15	5	2	1	1	6	2	1	1	3	
SPOKANE, WA.	12		32.3	3 9	8	2	2	0	10	2	4.7	5	3	8	5	2	3	4	1	5	1	2	3	2	1	1	8	
ST. LOUIS MO.	14		29.9	0 14	9	5	0	0	14	0	5.4	9	8	5	9	4	7	5	5	1	0	5	5	3	3	1	5	
TOTALS	109		31.5	10 171	114	54	10	35	136	25	5.6	70	83	110	82	57	113	104	49	32	13	31	49	24	14	9	71	

LEGEND:
 A - Art
 B - Craft
 C - Dance
 D - Dance
 E - Vocal

F - Instrument
 G - Music Education
 H - Drama
 I - Drama Education
 J - Film

K - Puppet
 L - Creative Writing
 M - Poetry
 N - Interior Design
 O - Landscape

AIE TEACHING PERSONNEL:

PERSONAL INTEREST IN THE ARTS AND

LEVEL OF COMFORT IN PRESENTING ARTS LESSONS

An analysis of personnel responses regarding interest in and comfort teaching arts, reveals the following general findings applicable to all field test sites: In general:

1. A majority of project personnel have a moderate or high personal interest in art, crafts, dance, vocals, and instrument.
2. A majority of project personnel have little or no personal interest in writing, poetry, film, drama, puppets, landscape, interior design.
3. Most personnel felt a moderate to high degree of comfort relating to teaching the following arts: art, crafts, dance, vocals, drama.
4. Most personnel felt little or no comfort relative to teaching instrument, puppets, creative writing, poetry, interior design, landscape.

DESCRIPTION OF PARTICIPATING CLASSES/STUDENTS

YEAR THREE

The following is a description of the student population (class) participating in the AIE project for the 189 classroom field sites.

ARLINGTON, TEXAS - ARLINGTON SCHOOLS

The Arlington site consisted of 10 classes; 9 self-contained, special education and 1 therapy class. A total of 111 students (106 handicapped), ranging in age from 3-21, participated. Teachers reported the following primary and secondary student disabilities: emotionally disturbed, mild mental retardation, and multiply handicapped.

CELANTANO SCHOOL - NEW HAVEN, CONNECTICUT

The self-contained, special education classes at this site contained 87 handicapped students ranging in age from 4-21 years. Primary and secondary handicapping conditions consisted primarily of mild mental retardation, but also included some learning disabled students.

CHATAUQUA COUNTY, NEW YORK - BOARD OF COOPERATIVE EDUCATIONAL SERVICES (BOCES)

Five self-contained, special education classes and 1 arts class, participated in the project. Children ranged in age from 5-21. Four hundred forty-four handicapped students participated. Handicapping conditions consisted of learning disabilities, multiple handicaps and emotional disturbances.

CLOVER PARK SCHOOL DISTRICT - TACOMA, WASHINGTON

A total of 21 classes (15 self-contained, special

education; 5 regular education; 1 math class) and 258 handicapped students participated in the project. Students ranged in age from 3-21 with primary and secondary disabilities of classes delineated as emotionally disturbed, mild mental retardation, learning disabled, and multiply handicapped.

GREAT FALLS, MONTANA - GREAT FALLS SCHOOL

This site consisted of 11 classes: 4 self-contained, 1 regular education, 3 resource rooms, and 3 arts classes. A total of 335 handicapped students, ranging from 2-21 years of age were involved in the field test. Primary and secondary classroom disabilities included the multiple handicapped, learning disabled, mildly mentally retarded and emotionally disturbed.

LOUISVILLE, KENTUCKY - URSULINE SCHOOL OF MUSIC

The 20 participating classes at this site consisted of 12 regular education, 2 self-contained special education, 5 arts classes and 1 music therapy class. Forty-five of the 389 participating students were handicapped, and ranged in age from 3-26. Primary and secondary handicapping conditions consisted of mild mental retardation and learning disabilities.

LOS ANGELES, CALIFORNIA - LOS ANGELES UNIFIED SCHOOL DISTRICT

The Los Angeles site consisted of 24 classes: 21 self-contained special education, 1 regular education and 2 integrated classes. The 258 handicapped students ranged in age from 1-21. Primary and secondary classroom disabilities consisted of multiply handicapped, mildly mentally retarded, and emotionally disturbed students.

LUMBERG ELEMENTARY SCHOOL - EDGEWATER, COLORADO

The 245 handicapped students at this site were dispersed into 19 different classes. Ten classes were regular education programs, 2 self-contained special education classes, 1 resource room, 2 arts classes and 4 other (labs, consultant) programs. Students ranged in age from 5-13. Teachers described classroom disabilities (primary and secondary) as emotionally disturbed, learning disabled, and behavioral and communicative disorders.

MONTGOMERY COUNTY PUBLIC SCHOOLS, MARYLAND - INTERRELATED
ARTS PROGRAM

The 10 classes in Montgomery County consisted of 9 self-contained special education classes and 1 arts program. The 290 handicapped participants ranged in age from 5-21 and exhibited learning disabilities, emotional disturbances, multiple handicaps, and mild mental retardation.

SARA'S CENTER - GREAT NECK, NEW YORK

The 3 participating staff at Sara's Center work with 25-50 students ranging in age from 7-41. Center students are emotionally disturbed and multiply handicapped.

SEATTLE, WASHINGTON - SEATTLE PUBLIC SCHOOLS

The 10 self-contained special education classes at this site serve 95 handicapped students from 5-14 years old. Primary and secondary handicapping conditions describe this population as mildly mentally retarded, multiply handicapped, orthopedically impaired, and some severely retarded.

SPEED DEVELOPMENTAL CENTER - CHICAGO HEIGHTS, ILLINOIS

The 21 classes at the Speed Developmental Center consisted of 15 self-contained special education classes, 1 regular class, 1 resource room, 2 arts programs, and 2 other (physical education, therapy) programs. The 194 handicapped students, from 5-21 years old, manifest the following primary or secondary handicapping conditions, mildly mentally retarded, severely/profoundly retarded, multiply handicapped, sensory impaired, emotionally disturbed and learning disabled.

SPOKANE, WASHINGTON - EDUCATIONAL SERVICE DISTRICT #101

The Spokane site included 12 classes, (10 self-contained special education, 1 physical education program and 1 speech program). The 254 handicapped students ranged in age from 3-18 with primary and secondary handicapping conditions comprised of mild mental retardation, learning disabilities, emotional disturbances and multiple handicaps.

ST. LOUIS, MISSOURI - ST. LOUIS SPECIAL SCHOOL DISTRICT

This site consisted of 14 self-contained special education classes, with 129 handicapped students from 5-16 years of age. Students manifested multiple handicaps, and orthopedic impairments.

OVERALL STUDENT/CLASSROOM PARTICIPANTS

The field sites (189 classes/programs) were composed of self-contained special education classes (65.6%), regular education classes (15.9%), resource programs (2.6%), arts programs (7.9%) and other physical education, therapy and speech programs (7.9%). A total of 3,54 students from 1-26 years old in 71 different schools participated. Of these students, 2,794 were handicapped. Handicapping conditions included sensory impairments, emotional disturbances, orthopedic disabilities, mental retardation (mild and severe), multiple handicaps, learning disabilities and perceptual and communicative disorders. Although the field site classrooms covered a full range of handicapping conditions, the majority of participating programs served the emotionally disturbed, mildly mentally retarded, multiply handicapped and the learning disabled. Reader is referred to Chart B for summary of student data.

Chart B

AIE SITE CLASSES/STUDENT PARTICIPANTS

AIE SITE	CLASS ROOM DESCRIPTION					# STU.	STU. AGE RANGE	# STUDENTS		PRIMARY/SECONDARY DISABILITIES										# CLASS
	SP. E. SELF CT.	REG.	RES.	ARTS	OTH.			HAND.	NON- HAND.	SENS- ORY	ED	OH	MMR	SMR	MH	LD	OTH.			
ARLINGTON TEXAS	9	-	-	-	1	111	3-21	106	5	-	3	1	3	-	4	-	-	10		
CELANTANO SCHOOL	8	-	-	-	-	87	4-21	87	0	1	-	-	7	-	1	2	-	8		
CHATAQUA CTY: BOCES	5	-	-	1	-	444	5-21	44	400	-	2	-	1	-	2	3	-	6		
CLOVER PK. SCH. DIST.	15	5	-	-	1	375	3-21	258	117	1	7	-	8	1	4	8	-	21		
GREAT FALLS MONTANA	4	1	3	3	-	368	2-21	335	33	-	1	-	2	-	5	3	-	11		
LOUISVILLE KY	2	12	-	5	1	389	3-26	45	344	-	-	-	5	-	-	3	1	20		
LOS ANGELES CA	21	1	-	-	2	282	1-21	258	24	-	4	-	6	-	13	-	-	24		
LUMBERG ELEM.	2	10	1	2	4	450	5-13	245	205	1	8	-	1	-	-	5	14	19		
MONTGOMERY PUB. SCH.	9	-	-	1	-	290	5-21	290	0	-	3	-	2	1	3	5	-	10		
SARA'S CENTER	-	-	-	1	2	50	7-41	50	0	-	-	-	-	-	3	-	-	3		
SEATTLE WA	10	-	-	-	-	95	5-14	95	0	1	-	2	6	2	4	1	2	10		
SPEED DEVELOP- MENTAL CTR.	15	1	1	2	2	219	5-21	194	25	1	1	1	11	5	2	1	-	21		
SPOKANE MO	10	-	-	-	2	265	3-18	254	11	-	2	-	5	-	2	5	2	12		
ST. LOUIS MO	14	-	-	-	-	129	5-16	129	0	-	-	5	-	-	9	-	-	14		
TOTALS	124	30	5	15	15	3554	1-26	2390	1164	5	31	9	57	9	52	36	19	189		

LEGEND:

CLASS ROOM DESCRIPTION

SP.E. SELF CT. - Special Education Self Contained

REG. - Regular

RES. - Residential

OTH. - Other

STU. - Students

HAND. - Handicapped

PRIMARY/SECONDARY DISABILITIES:

SENSORY - Sensory Impairments

ED - Emotionally Handicapped

OH - Orthopedically Handicapped

MMR - Mild Mentally Retarded

SMR - Severely Mentally Retarded

MH - Multiply Handicapped

LD - Learning Disabled

RESULTS AND ANALYSIS OF DATA

YEAR THREE

Dr. Hugh McBride, University of the Pacific, Stockton, California, analyzed the data collected from the teachers and administrators in the third year of Project AIE. His evaluation report follows.

Evaluation of the efficacy of the curriculum through perceptions of the Field Site teachers at the end of the project revealed the following data. The format and content of the Guide were seen as follows by the respondents:

- 85% perceived the overall format of the Guide to be appropriate.
- 98% indicated that the directions for the use of the Guide were satisfactory.
- 83% agreed that the directions for specific activities were sufficiently detailed as to be maximally useful.
- 81% agreed that the written styles of the Guide makes it easy to use.
- *57% felt that the suggested activities were appropriate for the various levels at which then respective classes were functioning.
- *65% were in agreement that the concept areas covered in the Guide are appropriate to the level of functioning in their classes.
- *94% concluded that the number of activities in each concept area covered by the Guide is sufficient.
- 84% agreed that the number of concepts addressed by the Guide is sufficient.
- 82% felt that the conceptual model employed by the Guide is understandable and useful.

*An explanation of the results in those instances where fewer than 80% of the respondents replied favorable follows.

As was previously indicated 57% of the teachers felt that the suggested items were appropriate to the various levels of functioning of children in their classes. The 43% who indicated that the activities were not appropriate reflects the diversity of the population using the Guide. That is to say, deaf, blind, severely handicapped and multiple handicapped children were included in the field test. It is axiomatic that activities would not be homogeneous in their utility. This occurrence was anticipated by the Project Director and modifications of activities to address the specific needs of different populations was solicited and contributed as a byproduct of this project.

The evaluation revealed that 65% of the teachers believed the concept areas covered by the Guide to be appropriate, while 35% did not. One would expect that the concepts addressed by the Guide and especially those at the aesthetic level would not be consistent with the needs of all children as perceived by the teachers. Again, this is a function of the diversity in the population of children to whom the Guide was made available. Teacher perceptions of the aesthetic needs or the relationship of aesthetic needs to skill acquisition of severely handicapped children require further inquiry.

The number of activities covered in each concept area was seen as sufficient by 65% of the teachers, 35% felt that there were not enough activities for each concept area. Again, this condition was anticipated by the Project Director and additional activities were solicited from the teachers. And they were encouraged to develop their own activities for their personal use.

The utility of the Guide as to its' capacity for improving Basic Learning Abilities such as gross motor skills, sensory motor and integration, conceptual skill, and social skills was evaluated.

The basic learning abilities were looked on as the dimension of each of the subject areas covered by the Guide. These were visual art, movement/dance, drama/theatre, and music.

The following constitute a breakdown of teacher perceptions of the activities in these subject areas as they improved the basic learning abilities.

PERCENT OF TEACHERS VIEWING SUBJECT AREAS
AS EFFECTIVE

<u>Basic Learning Ability</u>	<u>Arts</u>	<u>Dance</u>	<u>Drama</u>	<u>Music</u>	<u>Composit</u>
Gross Motor Level	78%	81%	64%	64%	72%
Sensory Motor	84%	72%	67%	73%	74%
Perceptual Motor Skills	86%	72%	61%	70%	72%
Language Development	75%	50%	75%	68%	67%
Conceptual Skills	78%	60%	63%	64%	66%
Social Skills	81%	70%	72%	73%	74%

The mean percent increase in perceptions by the teachers in overall Basic Learning abilities is 71%. This is an impressive amount when considering that 71% of all teachers felt that this Guide could improve skills of their children in the areas listed previously.

A detailed examination of the data on the previous page would indicate the nature of the art form activities for improving the basic learning skills of children, even children with the diversity of handicapping conditions found in this project. It is doubtful that any other methodology or technique could address these very different ability areas in such a unanimous fashion.

These results are consistent with what might be the expected results of specific types of arts experiences in the improvement of basic learning abilities.

The utility of the Guide as to its capacity for increasing aesthetic development was also evaluated. The areas of aesthetic development included in the conceptual model found on the evaluation form are: awareness, imitation, self initiation, skill development, and critical judgment.

The following constitutes a breakdown of teacher perceptions of the activities in the subject areas as they impacted upon the improvement of aesthetic development.

- a. Activities in Visual Art listed in the Guide were seen to be effective in bringing about improvement as follows:

84% awareness
 78% imitation
 65% self-initiation
 73% skill development
 55% critical judgment

- b. Activities in Movement/Dance listed in the Guide are effective in improving

78% awareness
 81% imitation
 67% self-initiation
 61% skill development
 39% critical judgment

- c. The activities in Drama/Theatre listed in the Guide are effective in improving:

73% awareness
 77% imitation
 62% self-initiation
 61% skill development
 48% critical judgment

- d. The activities in Music listed in the Guide are effective in improving:

82% awareness
 80% imitation
 66% self-initiation
 65% skill development
 47% critical judgment

The array presented below represents the mean of teachers who perceived improvement in each of the aesthetic development areas across all the subject areas of the guide.

awareness	80%
imitation	79%
self-initiation	65%
skill development	65%
critical judgement	47%

Examination of these data reveals that the teachers perceive awareness and imitation as being affected areas of aesthetic development and influenced by the activities of the Guide. Somewhat less dramatic is their view of the Guide as it impacts self-initiation and skill development. Nonetheless, 65% is impressive when viewing self-initiation and skill development

as they apply to the population of children served by the project. As mentioned previously, some teachers were serving severely and profoundly handicapped children as well as the deaf and blind. Two considerations pertain to the area of critical judgment which was seen as being improved by only 47% of the teachers. Critical judgment may have been misunderstood by the teachers or, given the nature of the population, critical judgment is not improved in low functioning multiple handicapped children through the use of these activities.

Administrators Perceptions:

The perceptions of administrators with respect to the utility of the Guide were elicited. The administrators were asked to evaluate (1) basic teacher involvement, (2) level of aesthetic involvement in the arts, and (3) the administrators perceptions of the Guide itself.

Table 1 indicated administrators perceptions of teachers as a group with respect to their usage of visual art, music, drama, and dance, in the development of the six basic learning abilities; gross motor, sensory motor utilization, perceptual motor skills, language development, conceptual skills and social skills.

Table 1
MEDIAN RATING

Learning Ability	Arts	Dance	Drama	Music	Composite Mean
Gross Motor Dev.	4.00	3.83	3.17	3.36	3.59
Sensory Motor Initiative	4.30	3.67	3.07	3.33	3.59
Perceptual Motor Skills	4.10	3.70	3.17	4.00	3.74
Language Development	3.36	3.67	3.93	4.17	3.78
Conceptual Skills	3.83	3.07	3.25	3.17	3.33
Social Skills	4.00	3.07	3.50	3.50	3.68

1. Indicates very low level of involvement.
2. Indicates low level of involvement.
3. Indicates average level of involvement.
4. Indicates high level of involvement.
5. Indicates very high level of involvement.

Explanation:

The data would indicate that administrators perceived art, graphic and visual, as being the most utilized format for the development of the six basic learning abilities. They also perceived music as being the second most frequently utilized mode of involvement.

One might expect these results. Traditionally teachers have taken art and music as part of their basic preparation program and are frequently more comfortable with these forms. Administrators may also be more willing to support and reference the use of music and art than drama and dance which may be perceived as more costly because of space and facilities demands.

Further analysis reveals that the Arts were seen as most utilized with gross motor abilities, and drama the least utilized. In sensory motor integration the visual arts were again seen as most utilized, with drama seen as having less usage. The perceptual motor area is seen as being addressed by the visual arts with drama being the least utilized. Music is seen as being most utilized for language development with visual arts as the least utilized area. The conceptual skills area is seen as being addressed most by visual art with dance being utilized least in this area. The visual arts were seen as being most utilized for social skills development with drama and music having the least utility in this area.

In the aggregate, language development was seen as having the most areas of the Guide addressed to it, with conceptual skill having the least.

Aesthetic Involvement:

Perceptions by administrators of teachers involvement in aesthetic activities in the visual arts, drama, dance, and music with respect to the five levels of aesthetic development is reflected in Table 2.

Table 3

Concerning Curriculum Guide	Administration Median Rating	Teacher (Percent in in Agreement with Statement)
Effective format	4.33	85%
Adequate General Directions	4.25	98%
Adequate Specific Direction	3.93	83%
Easily Used Style	4.20	81%
Diverse Activities	3.50	57%
Concept Areas Appropriate	3.17	65%
Number of Activities Sufficient	3.67	64%
Sufficient Number of Content Areas	4.10	84%
Conceptual Model Was Useful	- - -	82%

Analysis of Table 3 would reveal considerable agreement between teachers and administrators in those areas where there was a high percentage of agreement on the part of teachers regarding a criteria on the Guide. It might be concluded that active familiarity with the Guide, the materials and the children facilitated the agreement.

On the administrative rating a medial rating of 4.0+ would indicate substantial agreement, this would correspond with 80% - 90% of agreement on the teacher rating scale. It may be noted that on those criteria where least agreement was indicated by the administrators, those criteria reflected concomitant lack of agreement.

Table 4 provides a breakdown of most frequently used activities by week. Table 5 lists those items least frequently used. If an item was used 25 times or more it was considered to be frequently used. As can be seen by an examination of the data those items with frequent use were consistently active while those items with low utilization were not consistently used.

Table 2
MEDIAN RATING

Level of Aesthetic Involvement	Arts	Dance	Drama	Music	Composite Mean
Awareness	3.83	3.75	3.75	4.50	3.96
Imitation	4.30	4.00	4.00	4.50	4.20
Self Initiation	3.40	3.40	3.75	3.40	3.49
Skill Development	3.83	3.21	3.17	3.75	3.49
Critical Judgement	3.50	2.83	2.75	2.90	3.00

Administrators perceived that aesthetic involvement using the visual arts was greatest in aesthetic development of imitation and visual arts to be least involved in the development of self-initiation. They saw dance as having the greatest involvement in the development of imitation and the least in critical judgement. Drama involvement was seen most extensively as it effected imitation and least as it impacted on critical judgment. Music has maximum involvement in improvement in awareness and imitation.

Overall, imitation was seen as the most effective affective area, with critical judgment being the least effective.

Awareness appears to have great involvement with music as does imitation. Self-initiation appears to be most addressed by drama whereas skill development and critical judgment is most involved with visual art.

Comparison of Perceptions of the Utility of the Guide by Teachers and Administrators:

Table 3 below shows the relationship between the views of teachers and administrators on the utility of the Guide as defined by the nine criteria.

Table 4

MOST FREQUENTLY USED SET

Weeks

ACTIVITY	1-2	3-4	5-6	7-8	9-10	11-12
Animal Characterizations	59	59	26	58	43	66
Boys and Girls	62	53	24	60	40	60
Clay	68	58	26	60	47	69
Hidden Objects	92	77	48	89	70	99
Hokey Pokey	81	66	41	62	55	83
How Am I Moving?	72	51	37	60	37	66
Ink Blots	66	61	20	60	47	64
Loud and Soft	78	75	18	83	59	77
Mirrors	66	61	17	62	41	60
Names	95	79	33	88	73	91
Nod Your Head	72	59	33	65	49	68
Over/Under	71	66	31	72	45	73
Pat-A-Cake	69	50	39	50	54	71
Primary Colors	82	69	32	79	62	85
Rhythm Names	68	58	25	60	43	62
Seeing and Looking	96	92	38	97	68	102
Shadows	70	68	29	71	54	72
Stretch	108	101	41	103	66	106
The Tight Rope	69	62	34	60	45	68
Yellow and Blue	83	65	29	72	58	76

Table 5
LEAST USED SET OF ACTIVITIES
Weeks

	1-2	3-4	5-6	7-8	9-10	11-12
Adjustment	8	8	4	8	6	8
Boston Tea Party	0	0	0	0	0	0
Cosmic Improvisations	4	3	2	4	3	4
Cowboys	9	8	6	8	8	10
Doh-Ray-Me	6	6	1	6	5	6
End of the Giant Killer	2	2	0	2	2	2
Face Painting	10	10	9	11	10	12
Fee Fie Fo Fum	16	13	6	14	11	14
Grand Ole Opry	7	6	4	8	7	8
Green Bifocals	10	7	9	8	9	10
Hot Spies	8	7	5	8	6	7
Jack and the Beanstalk	7	6	4	7	6	7
Marshmallow Snowman Song	8	9	4	7	6	8
Masks	10	7	6	9	5	9
Milkcarton Music	11	8	3	10	6	11
More Jack	9	7	4	7	6	8
Moving Pictures	3	2	4	4	3	5
Patrick Henry	3	3	3	3	2	2
Personality	11	10	6	9	7	10
Plaster Gauze Masks	2	4	3	4	3	4
Revolution	11	10	6	12	9	12
Sabotage	14	15	5	13	9	12
Rose Colored Glasses	3	6	1	3	3	3
Sound Machines	17	15	8	14	10	14
Tin Pan Alley	4	3	3	4	1	4
Walking Through Jello	11	6	11	4	9	12
Word Families	10	10	7	10	5	10

Summary

The evaluation of the efficiency of the curriculum Guide indicated overall agreement on the part of teachers and administrators that the format is effective, the general directions are adequate as are the specific directions. They felt that the style was easily utilized and that there is a sufficient number of content areas. There was also agreement that activities were not sufficiently diverse, and that the number of concepts and activities addressed were somewhat inadequate.

Those areas where the ratings reveal concern, i.e., numbers of activities, diversity of activities and concept areas, have already been addressed. Additional activities with much diversity have been collected from participating teachers.

It is impressive to note that overall the teachers felt the Guide could improve the skills of children in all the areas of Basic Learning Ability and that this view was fairly consistent across all art forms.

In aesthetic development it would appear that all art forms were perceived as having the most impact on awareness and imitation and the least impact on critical judgment.

Critical judgment may not be well understood by teachers or the diversity in the population of children may have led the teachers to this conclusion.

Administrators perceived visual art as being the most utilized activity for the development of the basic learning skills. They all perceived that language development would be the area most effected by the teachers use of the art Guide.

Aesthetic development was seen as being most influenced by music with the greatest impact being seen in the area of imitation.

The administrators and teachers evaluation would indicate that the Guide has great value in changing the lives of handicapped children. They perceived it to be comprehensive, well organized and presented in a utilitarian format.

Recommendations:

1. The additional activities and modification of activities should be edited and compiled as an addendum to the original guide.

2. A study of the least frequently used and most frequently used items should be undertaken. This might be done by an analysis of the activities themselves by utilizing the criteria upon which the overall guide was evaluated. A random survey of the cooperating teacher also might be conducted regarding these selected items.
3. A statistical analysis of the Activity Evaluation Form would provide additional information on these selected items.

LEADERSHIP EVALUATION OF MODEL AND GUIDE
BY ARTS AND SPECIAL EDUCATION UNIVERSITY PERSONNEL
YEAR THREE

Dr. Larry Riccio summarized the findings of the Leadership Evaluation of the Arts for Learning Model and Guide by arts and special education university personnel. His report follows.

Arts in Learning Guide Evaluation Summary
by Arts and Special Education University Personnel

Objective: The evaluation was conducted for the purpose of receiving critical comments from professionals in the field regarding the curriculum materials.

Evaluators: Twelve professionals in the field of education: university professors, program directors, etc.

Evaluation Procedure: Evaluators completed a "Leadership Questionnaire". The questionnaire addressed the format and content of the Guide, and solicited expert comment on the importance of arts activities as agents of change/improvement in basic learning abilities.

General Findings: Evaluator comments clearly describe the Guide as an exciting and innovative addition to the field. Seventy-five (75%) of the respondents considered the Guide effective for introducing the arts into the curriculum for handicapped children, and 100% of the evaluators were willing to use the Guide as a tool in teacher training. Unanimously, evaluators found the conceptual model employed by the Guide comprehensible and useful.

Evaluators expressed concern regarding levels of functioning of handicapped children and appropriateness of concept areas and suggested activities. In general the Guide activities were considered to be restricted to younger children. In addition 50% felt that the number of activities should be expanded.

Evaluators were asked to rate the relative importance of specific Guide activities in effecting change in student skills and abilities. Figures 1 and 2 present a summary of percentage of evaluators who considered activities important agents of change.

Recommendations: Evaluator comments suggest a modification of Guide illustrations. According to one evaluator:

"I strongly feel that the illustrations should be changed. The way they are now severely limits the reading population. A more sophisticated approach would enhance the credibility of these information materials."

Representative Comments:

General:

- The concept is very exciting. The Guide is designed so that teachers with minimal skills...could direct the activities.
- The construct (model) on which the Guide is based is superb.
- Some directions of specific activities tend to become recipe-like...and may only be repetitious and not a creative experience..
- Some specific directions are unclear as to whether it is the teacher or pupil(s) who are to do whatever - example Section IV, page two.
- The basics are here, but in some areas, especially music... many of these children can be involved at a higher level of participation.
- Too bulky. I would have preferred a looseleaf book.
- Could be helpful with an approximate CA/MA designation (or developmental level).
- The concept of the master index is excellent! I particularly applaud the levels of aesthetic development as interlaced with the arts via basic learning abilities. The weakness, if there is one, is that the narrative does not fully capitalize on the brain-child model.
- Replacement activities or additional activities are needed to extend the initial efforts and to make the Guide truly useful.
- Would have liked to see some guidelines to measure success or failure of the activities (i.e., observing suggested behavioral changes in students).
- I would suggest that you add some material which discusses briefly the developmental stages of growth in art (scribbling, etc.), because I believe it is essential that the teachers need this background to direct the suggested activities effectively.
- Add CHILD ART THERAPY to the bibliography.

One Reviewer's Comments

"In general, I am most impressed with the Arts for Learning Guide. It represents the beginning of a much-needed resource of arts activities appropriate to the teaching and learning of skills in a broad range of areas. I am especially taken with the conceptual model illustrated so clearly on p. 7 of the Teachers Guide, in which the relationship among arts forms, levels of aesthetic development, and basic learning abilities is diagrammed. It is a good and sound framework on which to build further elaborations and refinements.

The activities described throughout seem to me to be appropriate for non-handicapped children, and indeed I would suggest that some thought be given to reaching the general school population and their instructors. When it comes to handicapped children, the guide is less powerful, for there are many activities which might be impossible, even with significant modification, for those who are more than mildly handicapped. Since the guide is ostensibly directed toward an exceptional population, I think you might want to include more than the notion that "they can really do it" as indicated on p. 30 of the teacher's guide, and specify some of the modifications that might be required. The same kind of imaginative thinking so well described in terms of curriculum development itself, might be detailed in helping teachers to deal with pupils' specific disabilities and their possible limitations.

As for the areas covered, I should like to suggest expanding that of "Social Skills" to include "Emotional Growth" as well (or another category if that seems more feasible). I am quite convinced that all children, but especially the handicapped, need to express and to deal with feelings. This is true for feelings in general, and especially for those related to the handicap itself, including fears and fantasies. An arts approach to such a learning goal I have found to be most appropriate in work with multiply-handicapped blind children, and would therefore fit in well with the overall thrust of the curriculum. To conceptualize about this domain, it might be helpful to look at some of the "affective education" curricula developed in recent years re. goals, (not activities (e.g. "magic circle" (human development curric.), Pflaum series, etc.).

I have some questions about the Bibliography - It gives the impression (perhaps wrongly) of being unselected; at least it includes things I am familiar with ranging from excellent to rotten, and has a number of items I think would be classified as "irrelevant" or at least "peripheral" (e.g. Shaun McNiff's conversation with Rudolf Arnheim on videotape). I think it would be more useful to teachers and others to be more selective, as well as more descriptive (e.g. annotations on all). Perhaps the coding method is more economical for categories

of materials, but I think listing items by category (media or topic) would be more useful.

Finally, I confess I may be more critical about art activities, since that is my primary field, but I feel uncomfortable with the number of copying and gimmicky ones, and think they could be replaced with more creative activities.

p.s. My apologies for being so critical - I assume that's what you wanted...In general, I think it's terrific, and am curious to know the field-test reaction.

Specific Curricula Comments:

- Music experiences are the least interesting.
- Vol. VII, page 11 - "What To Do" - participants increase volume when teacher raises a hand and decrease volume when hand is lowered. This activity as stated reinforces the confusion between high/low and loud/soft.
- Vol. V, page 35: students should sing the pitch names while they are played..... The title of this activity is spelled phonetically. It would seem appropriate to use the correct spelling of the syllables.....perhaps another form - e.g. Do Re Mi (Doh Ray Me).
- Vol. I, page 40: (Item #4) This is not a gross motor skill; why is it included?
- Vol. III, page 19 (Item #4) Why not give the child a choice of colors to drop on paper, rather than dropping any color on page.
- Vol. V, page 1: (Yellow and Blue) Not clear why yellow paper on wall is called an art product.
- Vol. VI, page 9: I fail to see how this item is considered drama rather than plain identification of concepts.
- Vol. VI, page 35: (Rose Colored Glasses) Interpretation of self concept is getting into projective techniques, and I do not see how it fits here.

Comments also suggest the following needs:

- Additional activities to expand usefulness;
- Extend activities to include higher level participation for older and higher functioning children;
- Include suggested modifications for use with severely handicapped population;
- Include brief discussion of development stages of growth in art (scribbling, etc.) in the introduction; and
- Review directions for each activity to clarify who is to do what. (some items were unclear as to whether the child or teacher was initiating an activity).

Summary Evaluation: The Summary Evaluation follows.

LEADERSHIP QUESTIONNAIRE
SUMMARY

ARTS IN EDUCATION FOR HANDICAPPED CHILDREN:
EVALUATION OF ARTS FOR LEARNING GUIDE

DIRECTIONS: Write your name, today's date, and your affiliation in the upper right hand corner. Then follow the directions for each part.

PART 1: Format and Content of Guide. Each of the statements below refers to the format or content of the Arts for Learning Guide. Make a check mark () on the line to the left of each statement with which you agree. Leave the line blank if you disagree with the statement.

<u>% / No.</u>		<u>Comments:</u>
<u>75 (9)</u>	1. The overall format of the Guide is appropriate.	Guide needs more structure.
<u>91.7 (11)</u>	2. The general directions are satisfactory.	
<u>75 (9)</u>	3. The specific directions for activities are adequate.	Vague on day to day planning basis.
<u>83.3 (10)</u>	4. The style in which the Guide is written makes it easy to use.	Suggested groupings would be helpful.
<u>41.6 (5)</u>	5. The suggested activities are appropriate for the various levels at which handicapped children are functioning.	Early elementary only.
<u>50 (6)</u>	6. The concept areas covered in the Guide are appropriate for levels of functioning of handicapped children.	For all students experiencing deficits in those areas.
<u>75 (9)</u>	7. The number of concept areas identified by the Guide is sufficient.	
<u>50 (6)</u>	8. The number of activities in each concept area covered by the Guide is sufficient.	A good start. Need more sequencing in terms of skills.
<u>100 (12)</u>	9. The conceptual model (arts-basic learning abilities-levels of aesthetic development) employed by the Guide is comprehensible and useful.	
<u>75 (9)</u>	10. The Guide is effective for introducing the arts into the curriculum for handicapped children.	
<u>100 (12)</u>	11. Check here if you would be willing to use the Guide as a tool in teacher training.	With supplementary materials.

PART II: The Arts for Learning Guide as a Change Agent. The teaching-learning model described in the Guide makes use of activities in the arts, dance/movement, drama/theatre, and music to improve students' basic learning abilities and their level of aesthetic involvement. Each of the numbered items listed below is concerned with improvement in one of the basic learning abilities or in a given level of aesthetic involvement. You are to indicate, on a five-point scale, how important you judge the activities presented in the Guide under each of the four areas (art, dance/movement, drama/theatre, music) to be in improving the characteristic, ability, or skill referred to in the item. Use the following scale:

- 1 = Unimportant
- 2 = Somewhat Important
- 3 = Important
- 4 = Very Important
- 5 = Extremely Important

Write a number on each of the four lines to the right of the item.

Characteristic, ability or skill:

Importance of
Guide's Activities in:

<u>ART</u>	<u>DANCE/ MOVEMENT</u>	<u>DRAMA/ THEATRE</u>	<u>MUSIC</u>
------------	----------------------------	---------------------------	--------------

1. Use of the large muscles
2. Integration of fine and gross motor activities
3. Functional use of auditory, visual, and visual-motor skills
4. Overall functioning in language
5. Concept attainment and general reasoning ability
6. Ability to cope with social situations
7. Appreciation of what is perceived and felt
8. Reproduction or mimicry of an object, action, or behavior
9. Initiation of activities by one-self
10. Making efforts to attain mastery or expertise
11. Thinking and evaluation with respect to a standard or ideal

SEE

ATTACHED

FIGURES 1 AND 2

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Figure 1.
Importance of Guide Activities
As Agents of Change (Percentages)

	Art	Dance/ Movement	Drama/ Theatre	Music
Use of Leg Muscles	70	100	62.5	66.6
Integration of Motor Activity	100	100	71.5	81.8
Use of Auditory, Visual Motor Skills	100	100	87.5	100
Language	66.6	70	100	50
General Reasoning	81.8	54.4	87.5	81.9
Socialization Skills	90.9	66.3	87.5	63.4
Appreciation	100	66.4	85.7	81.8
Reproduction/Mimicry	45.4	81.7	88.8	70
Initiation	72.6	91.7	87.5	70
Attain Mastery	81.9	91	87.5	60
Thinking & Evaluation	72.6	83	87.5	80

Figure 2.

SUMMARY OF MATERIALS EVALUATION:
IMPORTANCE OF ACTIVITIES AS AGENTS OF CHANGE (PERCENTAGE)

ABILITY OR SKILL	ART					DANCE/MOVEMENT					DRAMA/THEATRE					MUSIC				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1. Use of large muscles	20	10	--	50	20	--	--	18.2	36.4	45.5	--	37.5	25	12.5	25	--	33.3	11.1	44.4	11.1
2. Integration of motor activities	--	--	9	54.5	36.4	--	--	10	50	40	--	28.6	28.6	14.3	28.6	--	18.2	27.2	18.2	36.4
3. Use of auditory, visual, & visual motor skills	--	--	16.7	41.7	41.7	--	--	10	70	20	--	12.5	12.5	62.5	12.5	--	--	60	20	20
4. Overall functioning language	10	33.3	33.3	33.3	--	--	30	40	30	--	--	--	12.5	62.5	25	--	50	20	20	10
5. General reasoning	9	9	36.4	27.2	18.2	--	45.5	27.2	18.2	9	12.5	--	25	37.5	25	--	18.2	45.5	18.2	18.2
6. Socialization skills	--	9	27.2	45.5	18.2	--	33	8.3	33	25	12.5	--	25	37.5	25	9	27.2	9	27.2	27.2
7. Appreciation	--	--	20	40	40	--	33	33	16.7	16.7	--	14.3	57.1	14.3	14.3	--	18.2	36.4	18.2	27.2
8. Reproduction/ Mimiery	18.2	36.4	--	18.2	27.2	--	18.2	45.5	9	27.2	--	11.1	33.3	22.2	33.3	--	30	10	40	20
9. Initiation of activities	--	27.2	27.2	36.4	9	8.3	--	50	41.7	--	--	12.5	25	62.5	--	10	20	40	30	--
10. Efforts to attain mastery	--	18.2	36.4	45.5	--	--	8.3	33	58	--	--	12.5	62.5	25	--	--	40	30	30	--
11. Thinking & evaluation	--	27.2	27.2	36.4	9	--	16.7	16.7	58	8.3	12.5	--	25	62.5	--	--	20	30	50	--

KEY: 1. Unimportant
 2. Somewhat Important
 3. Important
 4. Very Important
 5. Extremely Important

SMALL STUDIES SEMINAR
THE NATIONAL COMMITTEE, ARTS FOR THE HANDICAPPED
ANNUAL CONFERENCE - JUNE 1979
YEAR THREE

At the close of Year Three of Project AIE, Administrative Liaisons and Master Teachers were invited to attend the NCAH National Annual Conference. As a part of this Conference, a Small Studies Seminar was conducted. The goals of the Conference and Seminar were:

- To increase awareness of AIE activities of each participating site.
- To critically examine the Arts for Learning Guide in terms of design, content, student-teacher population.
- To provide information about the data received by NCAH from Project Sites.
- To identify and discuss issues, concerns and questions concerning the integration of the Arts for Learning Guide into existing educational programs.

A summary of these discussions and recommendations follow.

Summary of AIE Small Studies Seminars

- Objective: To increase awareness of the AIE activities of each participating site.

SESSION I - AIE Coordinators made individual presentations, highlighting aspects of their participation in AIE.

SPEED Developmental Center - Betty Krebs

- Arts for Learning Guide works best with children in the middle ranges of functioning.
- The project didn't start early enough in the school year.
- After the project had started, many teachers asked if and how they could become involved.

Great Falls Public Schools - Mary Severns

- More teachers became involved in the project than had been expected.
- Teachers not involved were extremely interested in obtaining copies of the Guide

Sara's Center - Marion Berliner

- The Guide was used as an organizational structure, as staff development, and with Center participants on a daily basis.
- The Guide was helpful in directing the staff to explore uncomfortable areas in the arts and was a good diagnostic tool.

ESD #101 - Gene Fink and Carol Ann Mountjoy

- CETA artists used the Guide to conduct inservice training workshops.
- There is interest in using the Guide next year with teachers in the county.
- The volumes were used in flexible ways by teachers. For example, the speech teacher was able to use all the volumes, not just the one for language development.

Los Angeles Unified School District - Mildred Shehorn

- A representative teacher from each school in the district was sought so there would be trainers for next year.
- Teachers were paid to attend the initial orientation workshop.
- AIE project was tied into the VSAF.

Ursuline School of Music - Sister Serena Stauble

- Using the term "designs for learning" can move teachers away from their preconceived notions of what a curriculum is.

- Older girls were used to work with young children from Oral Deaf School in dance.
- The dance, drama, music, and art staff each used the Guide in their particular area.

Clover Park Schools - Georgene Mellom and Robin Blankers

- There was a variety of types of handicapping conditions represented in the project.
- Feedback from teachers was positive. They want to continue using it.
- Movement and drama were the most uncomfortable areas for teachers.
- The Guide can be used with nonhandicapped children.

Seattle Public Schools - Judith Meltzer

- This project marked the initial involvement of the special education department in the arts.
- Having a substantive Guide and "tool" to give the teachers was a plus.
- The teachers of orthopedically impaired students needed to adapt the lessons.

Celantano School - Ginger Clarkson

- The most successful volumes were gross and sensory motor development.
- The awareness and imitation levels were most frequently used.
- Lessons were easily adaptable.
- The level of the language development activities was too high.
- The teachers had problems with integrating the activities into the school day. The workshop led by Carol Weiner was helpful in addressing this issue.
- Teachers did a lot of lesson repetition.

Veda Knox School - Gwen Wilkins

- Lesson repetition was necessary.
- Teachers working with more severely handicapped children had to adapt the lessons the most.

Lumberg Elementary School - Bob Wallace and Alan Hubbard

- An inservice arts team conducted a full day workshop at the beginning of the project, doing "hands on" activities with teachers.
- The activity matrix was enlarged and put on a bulletin board in the teachers' lounge. Teachers signed their names to activities as they did them so others could go to them for suggestions, modifications.
- A total day of non-verbal communication (mime day) was held by the gifted and talented children who participated in the project.
- A poet-in-resident program is a spin-off of Lumberg's involvement in AIE.

St. Louis Special School District - Olive Chase

- The teachers participating for the second year did a better job of integrating the Guide into their program.
- The teachers participating for the second year felt that some of the lessons from the previous Guide were missing.
- The teachers had a feeling of "I Can Do" from using the Guide.
- There was not enough time for inservice.

Interrelated Arts Program - Susan Michal

- All types of handicapping conditions were represented.
- Teachers would like more lesson extensions and spin-offs.
- Teachers would like a chart which lists all activities in the volumes.

Objective: To critically examine the Arts for Learning Guide in terms of design, content, student and teacher population

SESSION II - Participants met in two discussion groups. The following is a summary of the discussion and recommendations:

Group One:

Design

- A chart listing all activities with a cross reference for curriculum areas and art forms would be helpful.
- It was hard to keep track of what activity had been done and where the activity could be found.
- A strong objection to the pictures was stated. They limited the audiences.
- Teachers could use guidance for what works best for each population. The use of symbols to delineate what has been successful with the visually impaired, for example, might be helpful.
- A "blow-up" chart similar to the one used by teachers in Lumberg Elementary School in Colorado is a good idea.

Content

- The Teachers' Guide, Talks to Teachers, should make clear that the Guide is for use with not only classroom teachers but also specialists (art, music, PE); stress "partnership" between the specialist and the classroom teacher.
- Music section is weak.
- We need to emphasize lesson adaptations and extensions.
- We need to show the connections the Guide has to the ongoing curriculum.
- Inservice is an integral part of the successful use of the Guide.

Student-Teacher Population

- Skills for students at the upper and lower ends of the scale should be added.
- The flexibility of the Guide should be stressed when introducing it to teachers.
- Lesson repetition should be stressed as an effective technique.
- A teacher support system is helpful.
- Salary points or pay is a good carrot for teacher involvement.

Group Two:

Design

- Format should basically be the same. However, the Guide should be in either one volume or multiple volumes with different colors or with shaded paper.
- A master index of all activities with a cross-reference would be helpful. A blown-up poster similar to that used by Lumberg Elementary School teachers was suggested.
- A checklist of skills was raised as a possibility.
- Do not list the populations for which the activities might apply or would be most successful. This is too limiting.
- Leave space in the lessons for teachers to write their own personal adaptations.
- Make titles more informative (not so "cute").
- Pictures are O.K., but they could be more indicative of the activity.
- Card file style was thrown out because they are too easily lost.

Content

- Activities under one category often fit in another. Some activities are almost duplicates of another only with a different name. (This was not stated as a criticism but as an observation and was accompanied by statement that repetition is learning).

Student-Teacher Population

- The main issue is how to implement a teacher training program and how to reward teachers for participating in inservice.

Objective: To identify and discuss issues concerning the integration of the Arts for Learning Guide into existing education programs

SESSION III & IV - Participants, as a large group, discussed the issues surrounding the future use of the Guide. The following is a summary of the discussion:

- The need for inservice as opposed to random distribution is necessary.

- Inservice must focus on what is meant by arts infusion.
- We must provide teachers with "how to" help.
- Levels of aesthetic development were used to compare the levels through which teachers must pass in order to infuse the arts successfully in their classroom.
- The types of effective inservice designs were discussed.
 - Inservice was described as a dissemination strategy.
 - The most effective method is to have teacher and child interacting, actually "doing it".
 - Less effective methods are role playing, media presentations
- Who should "do" the inservice was discussed.
 - Train AIE teachers to become trainers and emissaries.
 - Use of resource specialists and artists as trainers.
 - Pairing AIE teachers, trained artists, uninitiated special and regular education teachers with a stress on partnership
- There must be a commitment on part of administrators or management to train trainers and use the Guide and its approach.
 - The use of the Guide as a mainstreaming facilitator can be stressed.
 - The use of 94-142 monies for inservice training can be investigated
- NCAH is exploring the most effective ways in which the Guide can be disseminated.
 - The end of BEH/OE monies for this project was emphasized.
- Hugh McBride shared some highlights from the meeting of the National Committee and Board of Directors. Impact of Arts for the Handicapped can be increased by:
 - getting the arts mandated for inclusion in the IEP
 - incorporating arts for the handicapped courses in teacher training at the university level.
 - getting the special education commission/advisory committee/ and related groups to press for inclusion of the arts in the state plan.

EVALUATION OF YEAR THREE
OF PROJECT AIE AND SMALL STUDIES SEMINAR

AIE Project participants at the NCAH National Annual Conference in June, 1979, were asked to complete a questionnaire evaluating the Project and the Small Studies Seminar held in conjunction with the Conference.

These evaluations are summarized in the following report by Dr. Larry Riccio.

MEMO TO: Wendy Perks, Executive Director

FROM: Larry Riccio, Ed.D., Evaluation Consultant

RE: Third Party Evaluation of AIE Third Project Year and Third Annual National Meeting conducted by The National Committee, Arts for the Handicapped, Washington, D.C., June 26-28, 1979.

DATE OF THIS REPORT: August 20, 1979

The following report is divided into seven sections: Goals and Objectives, Participants, Seminar Agenda, Evaluation Procedure, General Findings, Recommendations, and Summary of Participant Comments on Evaluation Form.

Goals and Objectives: The overall goal of the meeting was to review year three activities of the AIE Project. The meeting proposed to meet this goal through the following conference objectives:

- To increase awareness of AIE activities of each participating site.
- To critically examine the arts for learning guide in terms of design, content, student-teacher population.
- To provide information about the data received by NCAH from Project Sites.
- To identify and discuss issues, concerns and questions concerning the integration of the Arts for Learning Guide into existing education programs.

Participants: Sixteen AIE Coordinators participated in the conference. Only 13 participants, however, completed evaluation forms.

Meeting Agenda: The day and a half seminar covered several subjects. Small study seminars covered each of the four objectives. In addition, a film, In Celebration! was shown to present highlights of the National VSAF, April 5-8, 1979, in Washington, D.C. Time was set aside for participants to visit Congressmen to increase their awareness of the importance of Congressional liaison with program sites.

Evaluation Procedure: Participants were asked to complete a Third Year AIE program evaluation form and a seminar evaluation form prior to departure from the meeting site. The purpose of these evaluations was to give feedback to the NCAH staff regarding accomplishment of objectives, arrangements (seminar logistics), relevance of materials and topics discussed.

General Findings: Participants evaluation of both program and meeting were overwhelmingly positive. All of the participants indicated communication from NCAH Project staff was excellent, and 93% said the program was extremely valuable to them. Seminar evaluations were consistently extremely high, with 100% feeling the first objective was met, 93% rating the second met, 54% rating the third was met and 77% rating the fourth met. All participants also felt their high expectations had been effectively met by the excellent AIE sessions.

Recommendations: This evaluator can only recommend that NCAH continue in its present direction. It succeeded in producing enthusiastic experienced proponents of arts in education.

Many of the participants found the communication of experience, ideas and enthusiasm among the participants a valuable aspect of the meeting and suggested that these be continued and increased.

A follow-up activity should be initiated to determine continued program input. Paper or phone contact several times in the next few months is a good way to gauge impact.

Summary Evaluations: A summary evaluation report follows.

Year Three

6. The least valuable aspect of my participation was:

Representative answers: not long enough; pressure and paper work; first day of meeting.

7. What changes would you suggest for implementing future projects of this nature?

Representative suggestions: start earlier in the year; involve more people; make more materials available at orientation.

8. Comments: publicity releases should be prepared detailing work in progress; would the guide be as valuable not in field test program; well organized.

ARTS IN EDUCATION PROJECT

Seminar Evaluation

June 26-28, 1979

1. Was objective met?

Session I

Yes								No
5 (9)	(75%)	4 (3)	(25%)	3		2		1

Session II

Yes								No
5 (11)	(85%)	4 (1)	(8%)	3		2 (1)	(8%)	1

Session III

Yes								No
5 (3)	(23%)	4 (4)	(31%)	3 (3)	(23%)	2 (1)	(15%)	1 (1) (8%)

Session IV

Yes								No
5 (5)	(38%)	4 (5)	(38%)	3 (3)	(23%)	2		1

2. Ample time?

Yes								No
5 (6)	(46%)	4 (3)	(23%)	3 (3)	(23%)	2		1 (1) (8%)

3. Meetings helpful in considering future?

Yes								No
5 (9)	(82%)	4		3		2		1 (2) (18%)

4. My expectations were:

High								Low
5 (7)	(54%)	4 (5)	(46%)	3		2		1

5. Value of these sessions:

High								Low
5 (5)	(38%)	4 (8)	(62%)	3		2		1

6. Most valuable aspect of seminars: exchange of new ideas and enthusiasm; discovery of usefulness of guide; clarification of next step.
7. Least valuable aspect of seminars: too short; indefinite future.

ARTS FOR LEARNING WORKSHOPS SUMMARY AND EVALUATION

YEAR THREE

The Arts For Learning Workshops were offered at all AIE participating sites as an additional inservice activity. Nine sites chose to have NCAH send an arts resource leader to their district to conduct an individualized workshop.

Workshop leaders were chosen by NCAH based on the specific interests and needs that were voiced by the site coordinators to the NCAH project coordinator. For example, one site felt that the teachers needed additional experience in using movement to increase learning skills. NCAH asked an experienced workshop leader in the area of dance and movement to conduct the workshop. The workshop leader and the site coordinator then contacted each other to determine the scope, duration, and specific activities for the workshop.

The workshops were generally 2-4 hours in length. Activities varied from providing teachers with additional experiences with lessons from the ARTS FOR LEARNING GUIDE To suggesting ways that the activities from the Guide can be adapted or extended. In some cases, workshop leaders led demonstrations with children and then involved the teachers in the experiences.

Dr. Larry Riccio evaluated these workshops. His synthesis of the evaluation of the individual workshop sessions follows. The evaluation of the workshops by individual site can be found in the Appendix.

This report is divided into 6 sections: Goals and Objectives, Participants, Evaluation Procedure, General Findings, Recommendations and Summary Evaluation.

Goals and Objectives: The overall goal of the workshops was to provide inservice training for Arts In Education (AIE) teachers on a voluntary basis. The workshops were structured to accomplish this goal through a variety of the following objectives:

- Provide teachers with specific arts activities which teach basis skills.
- Provide additional experiences in movement and dance to increase familiarity and comfort in classroom utilization.
- Provide technical assistance in using curricular materials from THE ARTS FOR LEARNING GUIDE.
- Assist teachers with methods for adapting arts activities to meet the needs of severely handicapped students.
- Extend/adapt activities in THE ARTS FOR LEARNING GUIDE.

Participants: One hundred twelve (112). AIE teachers participated in the workshops on a voluntary basis.

Conference Agenda: The half day workshops were organized for interaction and communication among participants. Workshops stressed experiential activities in a variety of the arts.

Evaluation Procedure: Participants at each workshop completed an Arts For Learning Workshop Evaluation form prior to departure from the workshop site. The purpose of this evaluation was to provide feedback to the NCAH staff regarding accomplishment of objectives, relevance of materials and topics and organization and presentation of activities.

General Findings

Participants' responses for all eight of the nine workshops indicated that these training sessions were highly successful in meeting the stated goals and objectives. Participants (84%) stated that the conferences had indeed assisted in raising their level of comfort in the use of the arts in the classroom, and had developed skills and new ideas for all who had attended.

Only one workshop appeared to miss its mark; Litzsinger School,

St. Louis, Missouri. Participants at this training session felt that the content and focus of the workshop was not quite appropriate to their typical student population. In spite of this possible miscommunication of need, respondents found other components of the program (organization, presentation, interaction, etc.) enjoyable and interesting.

All workshops were extremely well organized and presented, according to 97% of the respondents. Further, the workshops succeeded in creating a high degree of interaction and communication among its participants (84%). Overall, 93% considered the workshops a valuable to highly valuable experience.

Recommendations: Considering the success of these workshops NCAH should continue in their efforts to provide additional quality inservice training of this nature.

Representative participant comments address the need to present this type of inservice training early in the school year, with additional reinforcement in the spring.

Further, participants requested additional written/handout materials be provided, to solidify new concepts introduced. It was also suggested that NCAH attempt to include a greater number of teachers in the activities, and that sessions be extended. Participants should additionally be forewarned of appropriate dress to maximize active participation.

Summary Evaluation: The Summary Synthesis Evaluation Report follows.

Synthesis Summary Evaluation
Nine Arts For Learning Workshops
 May 6 - June 20, 1979

Enjoyable	83	18	5	3	-	-	1	Not Enjoyable
Useful	71	24	11	2	1	3	-	Useless
Unusual	2	-	-	9	15	23	63	Ordinary
Organized	84	15	4	2	5	-	2	Disorganized
Relevant	69	24	8	5	3	2	-	Irrelevant
Clear	77	23	9	3	-	-	-	Vague
Valuable	73	23	6	7	-	2	-	Worthless
Easy	44	19	13	29	4	2	-	Difficult
Like	87	20	2	2	1	-	-	Dislike
Meaningfull	76	23	6	4	1	2	-	Meaningless
Successful	81	20	4	6	-	1	-	Unsuccessful
Relaxed	75	25	4	6	1	1	-	Tense
Interesting	90	14	4	4	-	-	-	Boring

	<u>Excellent</u>	<u>Good</u>	<u>Adequate</u>	<u>Inadequat</u>
Organization and presentation	83	26	3	0
Interaction and communication	63	32	13	3
Length	38	38	21	12
Skills and new ideas	60	34	14	4
Comfort in use of arts	53	41	15	2

Changes and Comments

- o More chance for discussion and verbal explanation
- o Handouts and written information needed
- o Workshop should be given at beginning of school year
- o Friday afternoon workshop bad - pick a better time
- o Invite more people
- o More activities, varied art media
- o Leaders warmth and talent a great asset
- o Forwarn people so they can wear suitable clothes

Overall Rating

Highly valuable 79
 Valuable 30
 Of little value 2

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IXA SUMMARY, CONCLUSION AND RECOMMENDATIONS

SUMMARY

The Arts in Education project took place over a three year span of time, a time during which a wealth of information was collected, new learning about the use of arts in the education of handicapped children was acquired and additional questions were raised regarding the development of arts programs and research into their effectiveness with handicapped children.

Conclusion

- Results from the PIAT do indicate that students using an arts infused curriculum make academic gains. During the Project's first year, the analysis of covariance revealed increases in total test scores for the experimental group at the .05 level of significance. While the analysis of covariance during the second year didn't demonstrate any significant gains for the experimental group, a norm referenced approach indicated that students did make consistent yet small gains in academic performance.
- Data collected from non standardized instruments support the PIAT results. Measurements designed for this project to assess teachers' perceptions of basic learning skill development and aesthetic growth in their students were positive.
- It must be acknowledged that the Project by its design and procedures was measuring the impact of an intervention that was still in its formative stages. The developmental nature of the project may have impacted the test results.
- It is possible that a mismatch of groups during the second year occurred and accounts for the discrepancy in PIAT pre and post test scores of the experimental and control groups.
- We can conclude that while significantly large gains in PIAT scores were not made by the experimental groups in the second year of the project, they had less regression in academic performance than might have occurred without the arts infused intervention.

- Evaluations of the Arts for Learning Guide and Model by Project teachers, administrators and university personnel indicate that they found it to be comprehensive, well organized and presented in a utilitarian format. University respondents stated they would be willing to use the Guide as a tool in teacher training. Data from Project teachers suggest that the activities in the Guide are not sufficiently diverse or appropriate for the many levels of student functioning in their classes. Given that the population using the Guide consisted of students who were severely and profoundly handicapped, deaf and blind in addition to mild and moderately mentally handicapped and emotionally disturbed, it is to be expected that these activities would not be consistent with all the needs of all the children. Project teachers were encouraged to develop their own activities and suggest modifications of the activities.
- Data from the Project teachers indicate that they perceived the arts activities as having the most impact on awareness and imitation aesthetic levels and the least impact on critical judgment. Administrators perceived visual arts as being most used for developing basic learning skills and music for developing aesthetic growth.

Recommendations

- The concerns mentioned regarding the use of the PIAT in this project leads to the recommendation that an appropriate instrument for measuring the impact of an arts infused curriculum on academic skill development be designed. In addition a tool for measuring aesthetic development needs to be developed.
- Alternative research designs to measure the impact of the final Arts for Learning Model and Guide in the development of basic learning abilities and aesthetic growth need to be considered.
- Research design for future projects of this nature should allow for a longer period of testing and intervention time and consider a process oriented approach which allows for ongoing evaluation.

- Further research needs to include a training component which addresses teachers' lack of use of critical judgment activities and drama and dance art forms.
- A paper based on results of this project and other relevant projects which focuses on implications for further research in arts for the handicapped should be written. This paper should be used as a basis for a working conference on research in special education and the arts; attended by theorists, researchers and practitioners. Goals, objectives and strategies for future research should be considered.
- A research project which involves selected university faculty to use the Arts for Learning Model and Guide as a tool in preservice teacher training needs to be developed. This design should measure whether using this tool at the university level in preservice education results in more frequent use of the arts by these students when they become teachers.
- A research project which investigates the use of the arts in the education of handicapped children as an effective intervention strategy to prevent or ameliorate teacher burnout is needed. If the assumption that teacher burnout is partly due to the absence of opportunities for creativity, the arts could mean revitalization.
- A curriculum specialist should revise and refine the Guide using results from the year three data and knowledge gained from the overall project. Consideration should be given to using lesson modifications and additions submitted by year three project teachers; analyzing activities using specific criteria from year three forms; and adapting or diversifying activities to meet various levels of handicapping conditions.
- Additional research needs to be done focusing on the need for specific adaptation of arts activities to meet the needs of children with sensory impairments, orthopedic impairments and learning deficits, using the information gathered in the Project and carrying it a further step.

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X. APPENDIX

Peabody Individual Achievement Test

Test Materials. The PIAT test materials include the following:

1. Two volumes of test plates which are labelled below, that contain the demonstration and training exercises and test items, plus most of the instructions for the administration of the five subtests:

Volume I

- Subtest 1: Mathematics
- Subtest 2: Reading Recognition

Volume II

- Subtest 3: Reading Comprehension
- Subtest 4: Spelling
- Subtest 5: General Information

2. A packet of Individual Record Booklets. Besides providing space for recording and scoring responses to each of the five subtests, each booklet includes a profile. The stimulus materials to be read by the examiner in administering the Spelling subtest will also be found in the booklet.

3. Manual. (A Training Tape is also available from the Publisher as an optional item. It provides a guide to accepted pronunciations of words used in the Reading Recognition and Spelling subtests.)

The PIAT test materials are contained in two Easel-KitsTM - one for each of the volumes of plates. In addition to containing the demonstration and training exercises and the test items for all five subtests, the Individual Record Booklets and the Manual are stored in pockets on the Easel-Kit covers. These Easel-Kits may be placed easily in test-administration position by following the instructions found in them.

These Easel-Kit volumes have two advantages. First, the stimulus materials for the subject are presented to him at eye level. Second, in Volume I, the easel arrangement shields from the subject the examiner's instructions which are on the opposite side of the easel. Thus, the response plate for an item is exposed to the subject on one side, while the examiner can see both sides, the instructions and the subject's response plate-a necessity when the subject uses a pointing response. The size of print and spacing of the words for the instructions were designed for maximum readability when viewed at an angle.

The two volumes are arranged somewhat differently. In Volume I, the Mathematics subtest is located at the front of the book of plates and Reading Recognition is at the back. In Volume II, each of the Reading Comprehension items requires that two sheets be presented to the subject but pages are not needed for instructions after the Demonstration and Training Exercises. Thus, this subtest extends from the front to the back, using one side of the easel only. The reverse sides present the response materials on

the Spelling subtest and the materials to be read by the examiner on the General Information subtest. It was to condense the PIAT materials into two comparable volumes that the stimulus materials for the Spelling subtest, which are to be read by the examiner, were placed in the Individual Record Booklet. The questions asked by the examiner in the General Information subtest are printed in the orientation of a standard textbook. Since the subject responds orally, the easel feature is not needed and furthermore, the Reading Comprehension materials on the reverse side of the page would be distracting if the easel were used. When this subtest is given, Volume II can simply be held as any textbook would be or Volume I can be set up as an easel and used to support Volume II.

Qualifications of the Examiner. While no formal training is required to administer the PIAT, it is important that certain prerequisites be met. The detailed administration and scoring instructions outlined below should be studied thoroughly by persons preparing to administer the test for the first time. (Experienced examiners should also review these from time to time so as to insure the continued use of appropriate techniques.) For the norms to be appropriate, it is crucial that all of these instructions be followed precisely. It is also imperative that the examiner be completely familiar with all of the test materials and imperative that the examiner be completely familiar with all of the test materials and the appropriate procedures for handling them. Furthermore, the examiner must practice giving the instrument prior to its use as a standardized measure. If the examiner is able to establish rapport with his subject so as to elicit an optimal performance and if he follows precisely the directions, he should be able to obtain meaningful results with the PIAT.

Since no formal training is needed to administer the PIAT, a broad range of professionals in social service (if not technicians who are taught to give and score the PIAT according to directions) should be able to administer the test accurately. In fact, many of the PIAT standardization examiners had no formal psychometric training. Thus, when accurate numerical values or scores are required, a variety of para-educational professional persons—as well as technicians, if carefully selected, trained, and supervised—should be as effective as educators in giving the instrument. However, if clinical insights into the educational processes of the subject are needed, then experienced educators should be better able to discern significant response patterns than technicians or professional persons from the other disciplines.

Time Requirements. The PIAT is an untimed, power test and not a speed test. Thus the subject should not be hurried unduly. He should be given time, though not unlimited time, to work at his answer. If the subject appears to be engaged productively in solving the problem, let him complete his thought. However, generally after about 30 seconds on a mathematics item and 15 seconds on the other subtest items, he should be encouraged to make a choice or give an answer. In this way, only 30 to 40 minutes are usually required to administer and score the complete battery.

Order of Presentation of the Subtests. The five subtests of the PIAT are to be given in the order in which they are numbered. Mathematics is placed first because it requires no reading, writing or oral response and is interesting for most subjects, thus making it a good rapport establisher. The two reading subtests are positioned second and third because of their critical importance. Therefore, they are given while the subject is maximally attentive. Reading Recognition precedes Reading Comprehension because word attack skills are usually considered a precursor to getting meaning from sentences in print. Thus, the subject's score on the former determines whether the latter will or will not be given, and, if so, from what starting point. Spelling is administered after the reading subtests as a respite since it places relatively little pressure on the subject in that the task is a simple recognition, multiple-choice one with only a pointing response required. Finally, the General Information subtest is given because it has a question and answer format at which subjects are usually most effective after maximum rapport has been established. Another reason for placing the General Information subtest last is in anticipation that it will be the one most often omitted. While the examiner may choose to omit certain subtests, those administered should be given in the standard order since the test was standardized in that fashion. Thus, the norms will be most meaningful when this procedure is followed. Finally, the examiner should be cautioned that omitting subtests eliminates the possibility of using the Total Test norms.

THE TEACHER COMPETENCY INVENTORY/ARTS SURVEY FORM

INVENTORY

Total Replies:

1. What is your background in the Arts:

I have had classes or private lessons in:

Art (painting, sculpture, etc.)

Crafts (weaving, sculpture, etc.)

Art Education Methods

Dance (creative, ballet, etc.)

Music (vocal)

Music (instrumental)

Music Education Methods

Drama

Drama Education Methods

Film Making

Puppetry

Creative Writing

Poetry

Very	Moderately	Little or No
------	------------	--------------

2. I am personally interested in:

Art (painting, sculpture, etc.)

Crafts (weaving, pottery, etc.)

Dance (creative, ballet, etc.)

Music (vocal)

Music (instrumental)

Drama

Film Making

Puppetry

Creative Writing

Poetry

3. I would feel comfortable in presenting to a class experiences in:

Art (painting, sculpture, etc.)

Crafts (weaving, pottery, etc.)

Dance (creative, ballet, etc.)

Music (vocal)

Music (instrumental)

Drama

Film Making

Puppetry

Creative Writing

Poetry

1. How many pupils are there in your school district?

2,000 or more
500 to 1,999
Fewer than 500
No answer

2. What grade level do you teach? (If more than one, check the one to which you devote most time.)

elementary (grades K-6)
secondary (grades 7-12)
vocational - post high school
Title I coordinator
Counseling
Testing) Coordinator
Drug Educ.)
No answer

3. Do you think it is important to use "the Arts" as an integral part of your teaching?

Yes
No
-not much use for "arts" in reporting scientific findings
(answered No)
-question so broad it is meaningless
-only when it is supplementary, with exception of novels,
poetry, creative writing in language arts which should be
integrated (answered No)
-supplementary, not integral
No answer

4. Please check below whether you have had classes, private lessons, inservice work or other experiences in "the Arts".

	College Classes	Private Lessons	Inservice	Other Experi.
Art (drawing, painting, sculpture)				
crafts (weaving, pottery)				
Art Education Methods				
Dance (creative, ballet, etc.)				
Movement Education Methods				
Music (vocal)				
Music (instrumental)				
Music Education Methods				
Drama				
Drama Education Methods				
Film Making, Photography				
Puppetry				
Creative Writing				
Poetry				

____ No answer
____ None

____ - only preparation in any of these has been in nursery school area in college classes.

5. How comfortable would you feel in presenting to a class experiences in the activities listed?

	Very	Moderately	Slightly	Not at all or not Qualified
Art (drawing, painting, sculpture)				
Crafts (weaving, pottery)				
Dance (creative, ballet)				
Music (vocal)				
Music (instrumental)				
Drama				
Film Making, Photography				
Puppetry				
Creative Writing				
Poetry				

_____ No answer

_____ would teach none of these in my class

_____ -not prepared

_____ -irrelevant to my subject

6. If you are an ELEMENTARY teacher, please check the subjects you teach and then indicate, by using the appropriate letter (F,O,S,N), how frequently you use each of the forms of "the Arts" in teaching the subjects.

I Teach	Subjects	F = Frequently		O = Occasionally		S = Seldom		N = Never	
		Art	Movement	Music	Drama	Poetry	Other		
	Language Arts	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Math	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Science	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Social Studies	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	P.E.	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Music	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Art	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Other	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=

_____ - does not apply

_____ - I am strictly a reading teacher

_____ - I teach hearing-impaired children

-I do not teach art, music, or P.E. We have specialists in the building and do this.

7. If you are a SECONDARY teacher, please check the subject(s) you teach and then indicate, by using the appropriate letter (F,O,S,N) how frequently you use each of the forms of "the Arts" in teaching the subject(s).

F = Frequently

O = Occasionally

S = Seldom

N = Never

I Teach	Subjects	Art	Movement	Music	Drama	Poetry	Other
	Language Arts	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Math	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Science	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Social Studies	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Foreign Langs.	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	P.E.	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Voc. Subjects	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Music	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Art	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=
	Other	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=	F= S= O= N=

No Answer

-does not apply

I am strictly a reading teacher

8. By integrating "the Arts" into classroom teaching, I consider "the Arts" to be:

- ☐ knowledge/skills
- ☐ original expression
- ☐ appreciation/value
- ☐ all of the above
- ☐ don't know
- ☐ no answer
- ☐ -an integration with living
- ☐ -I use it as a vehicle to some other than objective in Social Studies (e.g., role-playing to sense the experience of a member of a pressure group).
- ☐ -all very important in integrating which is easy to do.
- ☐ -"exposure" would be a better word for what I try to do.
- ☐ -for personal enjoyment

9. I would like more help in the following:

Yes

No

Art (drawing, painting, sculpture)

Crafts (weaving, pottery)

Dance (creative, ballet)

Music (vocal)

Music (instrumental)

Drama

Film Making, Photography

Puppetry

Creative Writing

Poetry

too ambiguous

not applicable

passing levies

implementation into academic areas

where is the time?

no answer

-I do not believe "the Arts" can be used in vocational education.

-I would like new ideas in the following.

-(music (instrumental)) -- these are available but I can't make a carry-over to the classroom.

-(crafts (weaving, pottery)) -- facilities are poor.

10. What kind of help do you need? (Check all that apply.)

materials

in-service

people resources

tools/equipment

techniques of fostering a creative environment

strategies for incorporating "the Arts" into subject areas

multicultural input

administrative support

released time

no answer

not applicable

no help needed

space

mental

more hours in a day

always money

hard to compete with sports oriented administration and sports oriented

community

release time would be nice

SEMANTIC DIFFERENTIAL

ADTS

Slow	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Fast
Cruel	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Kind
Good	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Bad
Feminine (Woman-like)	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Masculine (Man-like)
Light	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Heavy
Dirty	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Clean
Strong	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Weak
Dull	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Sharp
Hard	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Soft
Passive (Not active)	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Active
Organized	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Disorganized
Ugly	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Goodlooking

DANCE, MOVEMENT

Kind	_____	_____	_____	_____	_____	_____	Cruel
Good	_____	_____	_____	_____	_____	_____	Bad
Feminine (Woman-like)	_____	_____	_____	_____	_____	_____	Masculine (Man-like)
Soft	_____	_____	_____	_____	_____	_____	Hard
Fast	_____	_____	_____	_____	_____	_____	Slow
Sharp	_____	_____	_____	_____	_____	_____	Dull
Light	_____	_____	_____	_____	_____	_____	Heavy
Active	_____	_____	_____	_____	_____	_____	Passive (Not active)
Weak	_____	_____	_____	_____	_____	_____	Strong
Clean	_____	_____	_____	_____	_____	_____	Dirty
Goodlooking	_____	_____	_____	_____	_____	_____	Ugly
Organized	_____	_____	_____	_____	_____	_____	Disorganized

BASIC SKILLS

Strong

____:____:____:____:____:____:____

Weak

Hard

____:____:____:____:____:____:____

Soft

Ugly

____:____:____:____:____:____:____

Goodlooking

Dull

____:____:____:____:____:____:____

Sharp

Slow

____:____:____:____:____:____:____

Fast

Passive

(Not active)

____:____:____:____:____:____:____

Active

Organized

____:____:____:____:____:____:____

Disorganized

Clean

____:____:____:____:____:____:____

Dirty

Good

____:____:____:____:____:____:____

Bad

Light

____:____:____:____:____:____:____

Heavy

Feminine

(Woman-like)

____:____:____:____:____:____:____

Masculine
(Man-like)

Cruel

____:____:____:____:____:____:____

Kind

THEATER, CREATIVE DRAMATICS

Goodlooking	_____	_____	_____	_____	_____	_____	_____	Ugly
Fast	_____	_____	_____	_____	_____	_____	_____	Slow
Soft	_____	_____	_____	_____	_____	_____	_____	Hard
Passive (Not active)	_____	_____	_____	_____	_____	_____	_____	Active
Disorganized	_____	_____	_____	_____	_____	_____	_____	Organized
Weak	_____	_____	_____	_____	_____	_____	_____	Strong
Sharp	_____	_____	_____	_____	_____	_____	_____	Dull
Heavy	_____	_____	_____	_____	_____	_____	_____	Light
Dirty	_____	_____	_____	_____	_____	_____	_____	Clean
Kind	_____	_____	_____	_____	_____	_____	_____	Cruel
Feminine (Woman-like)	_____	_____	_____	_____	_____	_____	_____	Masculine (Man-like)
Bad	_____	_____	_____	_____	_____	_____	_____	Good

THEATER, CREATIVE DRAMATICS

Goodlooking	_____	_____	_____	_____	_____	_____	_____	Ugly
Past	_____	_____	_____	_____	_____	_____	_____	Slow
Soft	_____	_____	_____	_____	_____	_____	_____	Hard
Passive (Not active)	_____	_____	_____	_____	_____	_____	_____	Active
Disorganized	_____	_____	_____	_____	_____	_____	_____	Organized
Weak	_____	_____	_____	_____	_____	_____	_____	Strong
Sharp	_____	_____	_____	_____	_____	_____	_____	Dull
Heavy	_____	_____	_____	_____	_____	_____	_____	Light
Dirty	_____	_____	_____	_____	_____	_____	_____	Clean
Kind	_____	_____	_____	_____	_____	_____	_____	Cruel
Feminine (Woman-like)	_____	_____	_____	_____	_____	_____	_____	Masculine (Man-like)
Bad	_____	_____	_____	_____	_____	_____	_____	Good

MUSIC

Organized	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Disorganized
Soft	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Hard
Cruel	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Kind
Active	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Passive (Not active)
Dirty	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Clean
Feminine (Woman-like)	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Masculine (Man-like)
Dull	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Sharp
Fast	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Slow
Good	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Bad
Heavy	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Light
Ugly	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Goodlooking
Strong	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Weak

STUDENT GROWTH, ACHIEVEMENT, ACCOMPLISHMENT THROUGH THE ARTS

Masculine (Man-like)	_____ : _____ : _____ : _____ : _____ : _____ : _____	Feminine (Woman-like)
Active	_____ : _____ : _____ : _____ : _____ : _____ : _____	Passive (Not active)
Cruel	_____ : _____ : _____ : _____ : _____ : _____ : _____	Kind
Slow	_____ : _____ : _____ : _____ : _____ : _____ : _____	Fast
Light	_____ : _____ : _____ : _____ : _____ : _____ : _____	Heavy
Weak	_____ : _____ : _____ : _____ : _____ : _____ : _____	Strong
Good	_____ : _____ : _____ : _____ : _____ : _____ : _____	Bad
Ugly	_____ : _____ : _____ : _____ : _____ : _____ : _____	Goodlooking
Dull	_____ : _____ : _____ : _____ : _____ : _____ : _____	Sharp
Soft	_____ : _____ : _____ : _____ : _____ : _____ : _____	Hard
Dirty	_____ : _____ : _____ : _____ : _____ : _____ : _____	Clean
Disorganized	_____ : _____ : _____ : _____ : _____ : _____ : _____	Organized

IN-SERVICE TRAINING

Good

____:____:____:____:____:____:____

Bad

Organized

____:____:____:____:____:____:____

Disorganized

Active

____:____:____:____:____:____:____

Passive
(Not active)

Clean

____:____:____:____:____:____:____

Dirty

Hard

____:____:____:____:____:____:____

Soft

Masculine
(Man-like)

____:____:____:____:____:____:____

Feminine
(Woman-like)

Light

____:____:____:____:____:____:____

Heavy

Kind

____:____:____:____:____:____:____

Cruel

Sharp

____:____:____:____:____:____:____

Dull

Goodlooking

____:____:____:____:____:____:____

Ugly

Strong

____:____:____:____:____:____:____

Weak

Slow

____:____:____:____:____:____:____

Fast

IN-SERVICE TRAINING

Good	_____	_____	_____	_____	_____	_____	_____	Bad
Organized	_____	_____	_____	_____	_____	_____	_____	Disorganized
Active	_____	_____	_____	_____	_____	_____	_____	Passive (Not active)
Clean	_____	_____	_____	_____	_____	_____	_____	Dirty
Hard	_____	_____	_____	_____	_____	_____	_____	Soft
Masculine (Man-like)	_____	_____	_____	_____	_____	_____	_____	Feminine (Woman-like)
Light	_____	_____	_____	_____	_____	_____	_____	Heavy
Kind	_____	_____	_____	_____	_____	_____	_____	Cruel
Sharp	_____	_____	_____	_____	_____	_____	_____	Dull
Goodlooking	_____	_____	_____	_____	_____	_____	_____	Ugly
Strong	_____	_____	_____	_____	_____	_____	_____	Weak
Slow	_____	_____	_____	_____	_____	_____	_____	Fast

LEARNING

Sharp	_____	_____	_____	_____	_____	_____	Dull
Organized	_____	_____	_____	_____	_____	_____	Disorganized
Slow	_____	_____	_____	_____	_____	_____	Fast
Strong	_____	_____	_____	_____	_____	_____	Weak
Ugly	_____	_____	_____	_____	_____	_____	Goodlooking
Clean	_____	_____	_____	_____	_____	_____	Dirty
Hard	_____	_____	_____	_____	_____	_____	Soft
Kind	_____	_____	_____	_____	_____	_____	Cruel
Passive (Not active)	_____	_____	_____	_____	_____	_____	Active
Bad	_____	_____	_____	_____	_____	_____	Good
Feminine (Woman-like)	_____	_____	_____	_____	_____	_____	Masculine (Man-like)
Heavy	_____	_____	_____	_____	_____	_____	Light

TEACHING

Good	_____	_____	_____	_____	_____	_____	_____	Bad
Active	_____	_____	_____	_____	_____	_____	_____	Passive (Not active)
Feminine (Woman-like)	_____	_____	_____	_____	_____	_____	_____	Masculine (Man-like)
Ugly	_____	_____	_____	_____	_____	_____	_____	Goodlooking
Heavy	_____	_____	_____	_____	_____	_____	_____	Light
Dull	_____	_____	_____	_____	_____	_____	_____	Sharp
Hard	_____	_____	_____	_____	_____	_____	_____	Soft
Disorganized	_____	_____	_____	_____	_____	_____	_____	Organized
Dirty	_____	_____	_____	_____	_____	_____	_____	Clean
Cruel	_____	_____	_____	_____	_____	_____	_____	Kind
Weak	_____	_____	_____	_____	_____	_____	_____	Strong
Fast	_____	_____	_____	_____	_____	_____	_____	Slow

THINGS STUDENTS LIKE TO DO BEST

Heavy	_____	_____	_____	_____	_____	_____	_____	Light
Hard	_____	_____	_____	_____	_____	_____	_____	Soft
Bad	_____	_____	_____	_____	_____	_____	_____	Good
Ugly	_____	_____	_____	_____	_____	_____	_____	Good looking
Strong	_____	_____	_____	_____	_____	_____	_____	Weak
Slow	_____	_____	_____	_____	_____	_____	_____	Fast
Active	_____	_____	_____	_____	_____	_____	_____	Passive (Not active)
Masculine (Man-like)	_____	_____	_____	_____	_____	_____	_____	Feminine (Woman-like)
Organized	_____	_____	_____	_____	_____	_____	_____	Disorganized
Dull	_____	_____	_____	_____	_____	_____	_____	Sharp
Dirty	_____	_____	_____	_____	_____	_____	_____	Clean
Kind	_____	_____	_____	_____	_____	_____	_____	Cruel

STUDENTS LEARNING BASIC SKILLS THROUGH THE ARTS

Kind	_____	_____	_____	_____	_____	_____	Cruel
Fast	_____	_____	_____	_____	_____	_____	Slow
Goodlooking	_____	_____	_____	_____	_____	_____	Ugly
Disorganized	_____	_____	_____	_____	_____	_____	Organized
Active	_____	_____	_____	_____	_____	_____	Passive (Not active)
Soft	_____	_____	_____	_____	_____	_____	Hard
Sharp	_____	_____	_____	_____	_____	_____	Dull
Weak	_____	_____	_____	_____	_____	_____	Strong
Clean	_____	_____	_____	_____	_____	_____	Dirty
Heavy	_____	_____	_____	_____	_____	_____	Light
Masculine (Man-like)	_____	_____	_____	_____	_____	_____	Feminine (Woman-like)
Bad	_____	_____	_____	_____	_____	_____	Good

STUDENT GROWTH, ACHIEVEMENT, ACCOMPLISHMENT

Ugly	_____	_____	_____	_____	_____	_____	_____	Goodlooking
Hard	_____	_____	_____	_____	_____	_____	_____	Soft
Kind	_____	_____	_____	_____	_____	_____	_____	Cruel
Sharp	_____	_____	_____	_____	_____	_____	_____	Dull
Disorganized	_____	_____	_____	_____	_____	_____	_____	Organized
Weak	_____	_____	_____	_____	_____	_____	_____	Strong
Heavy	_____	_____	_____	_____	_____	_____	_____	Light
Slow	_____	_____	_____	_____	_____	_____	_____	Fast
Feminine (Woman-like)	_____	_____	_____	_____	_____	_____	_____	Masculine (Man-like)
Passive (Not active)	_____	_____	_____	_____	_____	_____	_____	Active
Dirty	_____	_____	_____	_____	_____	_____	_____	Clean
Bad	_____	_____	_____	_____	_____	_____	_____	Good

THINGS I LIKE TO DO BEST

Light	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Heavy
Strong	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Weak
Organized	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Disorganized
Dull	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Sharp
Cruel	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Kind
Soft	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Hard
Goodlooking	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Ugly
Good	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Bad
Clean	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Dirty
Active	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Passive (Not active)
Masculine (Man-like)	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Feminine (Woman-like)
Fast	_____	:	_____	:	_____	:	_____	:	_____	:	_____	:	_____	Slow

STUDENTS LEARNING BASIC SKILLS THROUGH THE ARTS

Good Looking	_____	_____	_____	_____	_____	_____	_____	Ugly
Fast	_____	_____	_____	_____	_____	_____	_____	Slow
Soft	_____	_____	_____	_____	_____	_____	_____	Hard
Passive (Not active)	_____	_____	_____	_____	_____	_____	_____	Active
Disorganized	_____	_____	_____	_____	_____	_____	_____	Organized
Weak	_____	_____	_____	_____	_____	_____	_____	Strong
Sharp	_____	_____	_____	_____	_____	_____	_____	Dull
Heavy	_____	1	_____	_____	_____	_____	_____	Light
Dirty	_____	_____	_____	_____	_____	_____	_____	Clean
Kind	_____	_____	_____	_____	_____	_____	_____	Cruel
Feminine (Woman-like)	_____	_____	_____	_____	_____	_____	_____	Masculine (Man-like)
Bad	_____	_____	_____	_____	_____	_____	_____	Good

W = Weak
A = Average
S = Strong
VS = Very Strong

Teacher _____

Location _____

CHECKLIST FOR PARENTS AND TEACHERS

ARTISTIC GROWTH IN CHILDREN

Use attached definitions to make check marks that show your child's artistic level.

		JUNE				
		VW	W	A	S	VS
VISUAL ART						
Awareness						
Imitation						
Self Initiation						
Skill Development						
Critical Judgement						
MUSIC						
Awareness						
Imitation						
Self Initiation						
Skill Development						
Critical Judgement						
DRAMA						
Awareness						
Imitation						
Self Initiation						
Skill Development						
Critical Judgement						
DANCE						
Awareness						
Imitation						
Self Initiation						
Skill Development						
Critical Judgement						

DESCRIPTIVE DATA FOR PROJECT AIE

- | | |
|---|----------------------|
| 1. Child's Name | 2. Code # |
| 3. Location | 4. Teacher's Name |
| 5. Programmatic Designation | 6. Chronological Age |
| 7. Mental Age | 8. Sex |
| 9. I.Q. Score Test Used | 10. Days in Project |
| 11. Withdrawal Date | |
| 12. Description of Physical, Mental, Emotional,
Or Sensory Deficit | |

13. Checklist returned by parent? _____
completed by teacher? _____

14. Piat Test Results

Examiner: _____ Pre _____ Post _____

Time: _____

Date: 7/1/78

Raw Scores

Math	
Reading	
Recognition	
Cognition	
Spelling	
General Info	
Total Test *	

Math	
Reading	
Recognition	
Cognition	
Spelling	
General Info	
Total Test *	

Comments:

* Note: Please check your addition.

Teacher _____

Week of _____

School _____

TEACHER'S LOG

Learning Activity	Page #	Rating			Additions, Corrections, Improvements
		Highly Useful	Useful	Not Useful	

THE NATIONAL COMMITTEE, ARTS FOR THE HANDICAPPED
ARTS IN EDUCATION PROJECT
MASTER TEACHERS

Please fill in the information below and return to:

The National Committee, Arts for the Handicapped
1701 K Street, N.W. Suite 801
Washington, D.C. 20009

Due: With Week 1 Activity Evaluations

1. Name: _____
2. School: (Address) _____ (Phone) _____
3. Number of students in the participating school(s): _____
(If more than 1 school, list TOTAL)
4. Number of handicapped students in the participating school(s): _____
5. Types of students' handicapping conditions: _____

6. Types and number of professional staff:
____ Special Education Teachers
____ Regular Education Teachers
____ Arts Education Teachers
____ Resource Teachers
____ Other (Specify) _____
7. List the types of services available to the handicapped children in the school(s): _____

8. The school(s) is located in an area which is primarily (check):
____ Urban
____ Rural
____ Suburban
9. What is the population (adults and children) of the community/area in which the school(s) is located: _____

THE NATIONAL COMMITTEE, ARTS FOR THE HANDICAPPED

ARTS IN EDUCATION PROJECT

FIELD TEST SITE TEACHERS

PLEASE FILL IN THE INFORMATION BELOW:

1. Name: _____

School: _____ Phone: _____

Address: _____

2. Age: _____ 3. Sex: () Male () Female

4. Professional Experience (Circle the position you currently hold and indicate the number of years you have held the position):

- () Special Education Teacher
() Regular Classroom Teacher
() Arts Education Teacher (Specify: _____)
() Other (Describe: _____)

5. Education (Check the items that apply to you):

- () Bachelor's degree
() Master's degree
() Post Master's work

Major _____

6. Classroom Description (Self-contained, arts, integrated, etc.):

Total Number of Students: _____

Number of Disabled Students: _____

Types of Disabilities: _____

Ages of Students: _____

Number of Teachers/Aides in the Classroom: _____

What is your background in the Arts?

I have had classes or private lessons in:

Art (painting, sculpture, etc.)

Crafts (weaving, sculpture, etc.)

Art Education Methods

Dance (creative, ballet, etc.)

Music (vocal)

Music (instrumental)

Music Education Methods

Drama

Drama Education Methods

Film Making

Puppetry

Creative Writing

Poetry

Interior Design

Landscaping (flower arranging
etc.)

Very

Moderately

Little
or No

I am personally interested in:

Art (painting, sculpture, etc.)

Crafts (weaving, pottery, etc.)

Dance (creative, ballet, etc.)

Music (vocal)

Music (instrumental)

	<u>Very</u>	<u>Moderately</u>	<u>Little or no</u>
Drama	<u>5</u>	<u> </u>	<u> </u>
Film Making	<u> </u>	<u> </u>	<u> </u>
Puppetry	<u> </u>	<u> </u>	<u> </u>
Creative Writing	<u> </u>	<u> </u>	<u> </u>
Poetry	<u> </u>	<u> </u>	<u> </u>
Interior Design	<u> </u>	<u> </u>	<u> </u>
Landscaping	<u> </u>	<u> </u>	<u> </u>

I would feel comfortable in presenting
to a class experiences in:

Art (painting, sculpture, etc.)	<u> </u>	<u> </u>	<u> </u>
Crafts (weaving, pottery, etc.)	<u> </u>	<u> </u>	<u> </u>
Dance (creative, ballet, etc.)	<u> </u>	<u> </u>	<u> </u>
Music (vocal)	<u> </u>	<u> </u>	<u> </u>
Music (instrumental)	<u> </u>	<u> </u>	<u> </u>
Drama	<u> </u>	<u> </u>	<u> </u>
Film Making	<u> </u>	<u> </u>	<u> </u>
Puppetry	<u> </u>	<u> </u>	<u> </u>
Creative Writing	<u> </u>	<u> </u>	<u> </u>
Poetry	<u> </u>	<u> </u>	<u> </u>
Interior Design	<u> </u>	<u> </u>	<u> </u>
Landscaping	<u> </u>	<u> </u>	<u> </u>

THE NATIONAL COMMITTEE, ARTS FOR THE HANDICAPPED

ARTS IN EDUCATION PROJECT

ADMINISTRATIVE LIAISON

Please write your name, school and today's date below. Then follow the directions for each of the three parts of this evaluation form. Due: By June 1, 1979, or upon completion of the project.

Name of Evaluator: _____

School: _____

Date: _____

PART I. Basic Teacher Involvement: Use the following numerical scale to rate the teachers (as a group) who are involved in the AIE project with respect to their usage of art, music, drama/theatre, and movement/dance in the development of the six basic learning abilities (gross motor development, sensory-motor integration, perceptual-motor integration, language development, conceptual skills development and social skills development).

1. Very low level of involvement
2. Low level of involvement
3. Average level of involvement
4. High level of involvement
5. Very high level of involvement

Circle the appropriate number after each of the four subject matter areas under each of the six basic learning abilities.

Teacher Involvement

A. Gross Motor Development - The large muscles are developed, and the child can use them for activity in:

Very Low	Low	Average	High	Very High
----------	-----	---------	------	-----------

1. Arts
2. Movement/Dance
3. Drama/Theatre
4. Music

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

B. Sensory-Motor Integration - The child integrates fine and gross motor activities in:

1. Arts
2. Movement/Dance
3. Drama/Theatre
4. Music

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

Teacher Involvement

	Very Low	Low	Ave- rage	High	Very High
C. Perceptual-Motor Integration - The child uses auditory, visual, and visual-motor skills in a functional manner in:					
1. Arts	1	2	3	4	5
2. Movement/Dance	1	2	3	4	5
3. Drama/Theatre	1	2	3	4	5
4. Music	1	2	3	4	5
D. Language Development - At what level is the child currently functioning in overall linguistic development in:					
1. Arts	1	2	3	4	5
2. Movement/Dance	1	2	3	4	5
3. Drama/Theatre	1	2	3	4	5
4. Music	1	2	3	4	5
E. Conceptual Skills Development - At what level is the child functioning in concept attainment and general reasoning ability in:					
1. Arts	1	2	3	4	5
2. Movement/Dance	1	2	3	4	5
3. Drama/Theatre	1	2	3	4	5
4. Music	1	2	3	4	5
F. Social Skills Development - The child demonstrates problem solving skills in a social context in:					
1. Arts	1	2	3	4	5
2. Movement/Dance	1	2	3	4	5
3. Drama/Theatre	1	2	3	4	5
4. Music	1	2	3	4	5

PART II. Level of Aesthetic Involvement: Use the same numerical scale as in Part I to rate the teachers' level of involvement in aesthetic activities in the arts, movement/dance, drama/theatre, and music with respect to the five levels of aesthetic development (awareness, imitation, self initiation, skill development, critical judgment). Circle the appropriate number after each of the four subject matter areas under each of the six basic learning abilities.

Aesthetic Involvement

A. Awareness - The child consciously realizes or appreciates what is perceived and felt in:

Very Low	Low	Average	High	Very High
----------	-----	---------	------	-----------

- | | | | | | |
|-------------------|---|---|---|---|---|
| 1. Arts | 1 | 2 | 3 | 4 | 5 |
| 2. Movement/Dance | 1 | 2 | 3 | 4 | 5 |
| 3. Drama/Theatre | 1 | 2 | 3 | 4 | 5 |
| 4. Music | 1 | 2 | 3 | 4 | 5 |

B. Imitation - The child reproduces or mimics an object, action or behavior in:

- | | | | | | |
|-------------------|---|---|---|---|---|
| 1. Arts | 1 | 2 | 3 | 4 | 5 |
| 2. Movement/Dance | 1 | 2 | 3 | 4 | 5 |
| 3. Drama/Theatre | 1 | 2 | 3 | 4 | 5 |
| 4. Music | 1 | 2 | 3 | 4 | 5 |

C. Self-initiation - The child shows unique behavior stemming from personal (individual) motivations or impulses in:

- | | | | | | |
|-------------------|---|---|---|---|---|
| 1. Arts | 1 | 2 | 3 | 4 | 5 |
| 2. Movement/Dance | 1 | 2 | 3 | 4 | 5 |
| 3. Drama/Theatre | 1 | 2 | 3 | 4 | 5 |
| 4. Music | 1 | 2 | 3 | 4 | 5 |

D. Skill Development - The child makes an effort to gain mastery or expertise in:

- | | | | | | |
|-------------------|---|---|---|---|---|
| 1. Arts | 1 | 2 | 3 | 4 | 5 |
| 2. Movement/Dance | 1 | 2 | 3 | 4 | 5 |
| 3. Drama/Theatre | 1 | 2 | 3 | 4 | 5 |
| 4. Music | 1 | 2 | 3 | 4 | 5 |

E. Critical Judgment - The child shows thinking and evaluation with respect to some standard or ideal in:

- | | | | | | |
|-------------------|---|---|---|---|---|
| 1. Arts | 1 | 2 | 3 | 4 | 5 |
| 2. Movement/Dance | 1 | 2 | 3 | 4 | 5 |
| 3. Drama/Theatre | 1 | 2 | 3 | 4 | 5 |
| 4. Music | 1 | 2 | 3 | 4 | 5 |

PART III. Format and Content: Effectiveness of the Arts for Learning Guide. The statements listed below pertain to the format and content of the Guide. Indicate the extent to which you agree or disagree with each statement by using the following scale.

SD - Strongly Disagree
D - Disagree
U - Undecided
A - Agree
SA - Strongly Agree

Circle the appropriate letter after each statement.

Format & Content

- | | | | | | |
|---|----|---|---|---|----|
| 1. The format of the Guide is effective | SD | D | U | A | SA |
| 2. The general directions (overview, matrix) are satisfactory. | SD | D | U | A | SA |
| 3. The specific directions for activities are adequate. | SD | D | U | A | SA |
| 4. The style of the Guide made it easy to use | SD | D | U | A | SA |
| 5. The activities were sufficiently diverse to be appropriate for the various levels of functioning of the children of your class | SD | D | U | A | SA |
| 6. The concept areas covered in the Guide were appropriate to the levels of functioning of the children in your class. | SD | D | U | A | SA |
| 7. The number of activities in each concept area covered by the Guide is sufficient | SD | D | U | A | SA |
| 8. The number of concept areas identified by the Guide is sufficient | SD | D | U | A | SA |

Name: _____

School: _____

Date: _____

Due: By June 1, 1979, or upon completion
of project

THE NATIONAL COMMITTEE, ARTS FOR THE HANDICAPPED

ARTS IN EDUCATION PROJECT

ARTS FOR LEARNING GUIDE AND MODEL

To be completed by Field Test Site Teachers and Master Teachers at the end of project

Please write your name, school and today's date in the upper right hand corner.
Then follow the directions for each of the three parts of this evaluation form.

PART I. Format and Content of Guide: Each of the statements in this part refers to the format or content of the Arts for Learning Guide. Make a check mark (✓) on the line to the left of each statement with which you agree. Leave the line blank if you disagree with the statement.

- _____ 1. The overall format of the Guide is appropriate.
- _____ 2. The general directions are satisfactory.
- _____ 3. The specific directions for activities are adequate.
- _____ 4. The style in which the Guide is written makes it easy to use.
- _____ 5. The suggested activities are appropriate for the various levels at which the children in your class are functioning.
- _____ 6. The concept area covered in the Guide is appropriate to the levels of functioning of the children in your class.
- _____ 7. The number of activities in each concept area covered by the Guide is sufficient.
- _____ 8. The number of concept areas identified by the Guide is sufficient.
- _____ 9. The conceptual model (arts - basic learning abilities - levels of aesthetic development) employed by the Guide is understandable and useful.

Part II. Basic Learning Abilities: Each of the items in this part is concerned with a specific subject area (arts, movement, drama, and music). The six basic learning abilities of the conceptual model in the arts are listed below in each of the four subject areas. Make a check mark (✓) on the line to the left of each basic learning ability if you feel that the activities in the subject area are effective in improving the basic learning ability.

A. Activities in the arts listed in the Guide are effective in improving:

- _____ 1. Gross motor development
- _____ 2. Sensory motor integration
- _____ 3. Perceptual motor skills
- _____ 4. Language development
- _____ 5. Conceptual skills
- _____ 6. Social skills

B. The activities in movement/dance listed in the Guide are effective in improving:

- ☐ 1. Gross motor development
- ☐ 2. Sensory motor integration
- ☐ 3. Perceptual motor skills
- ☐ 4. Language development
- ☐ 5. Conceptual skills
- ☐ 6. Social skills

C. The activities in drama/theatre listed in the Guide are effective in improving:

- ☐ 1. Gross motor development
- ☐ 2. Sensory motor integration
- ☐ 3. Perceptual motor skills
- ☐ 4. Language development
- ☐ 5. Conceptual skills
- ☐ 6. Social skills

D. The activities in music listed in the Guide are effective in improving:

- ☐ 1. Gross motor development
- ☐ 2. Sensory motor integration
- ☐ 3. Perceptual motor skills
- ☐ 4. Language development
- ☐ 5. Conceptual skills
- ☐ 6. Social skills

Part III. Aesthetic Development: As in Part II, each of the items in this part is concerned with a specific subject area (the arts, movement, drama, music). The five levels of aesthetic development of the conceptual model in the arts are listed below each of the subject areas. Make a check mark (✓) on the line to the left of each level of aesthetic development if you feel that the activities in the subject area are effective in improving performance at the specific level of aesthetic development.

A. Activities in the arts listed in the Guide are effective in improving:

- ☐ 1. Awareness
- ☐ 2. Imitation
- ☐ 3. Self-initiation
- ☐ 4. Skill development
- ☐ 5. Critical judgment

B. Activities in movement/dance listed in the Guide are effective in improving:

- ☐ 1. Awareness
- ☐ 2. Imitation
- ☐ 3. Self-initiation
- ☐ 4. Skill development
- ☐ 5. Critical judgment

C. The activities in drama/theatre listed in the Guide are effective in improving:

- ☐ 1. Awareness
- ☐ 2. Imitation
- ☐ 3. Self-initiation
- ☐ 4. Skill development
- ☐ 5. Critical judgment

D. The activities in music listed in the Guide are effective in improving:

- ☐ 1. Awareness
- ☐ 2. Imitation
- ☐ 3. Self-initiation
- ☐ 4. Skill development
- ☐ 5. Critical judgment

COMMENTS: You are encouraged to make written comments about the effectiveness of the conceptual model and/or the Guide.

ACTIVITY EVALUATION - FIELD TEST SITE TEACHERS

School: _____ Evaluator: _____

In the space provided, please fill in the name of each activity which you utilized during the week. Make a check mark on the line to the left of each statement with which you agree. You are encouraged to make comments on the effectiveness of the activities on the back side of the form. You should complete this form on a weekly basis and return it to your Master Teacher.

Name of Activity: _____

- _____ 1. The specific directions for the arts activity are adequate.
- _____ 2. The level of this arts activity is appropriate to the level of the class.
- _____ 3. It was necessary to adapt the arts activity to accommodate handicapping conditions.
- _____ 4. The basic learning objective was met.
- _____ 5. I perceive aesthetic growth in the children through the use of this activity.
- _____ 6. I would utilize this arts activity again.

Name of Activity: _____

- _____ 1. The specific directions for the arts activity are adequate.
- _____ 2. The level of this arts activity is appropriate to the level of the class.
- _____ 3. It was necessary to adapt the arts activity to accommodate handicapping conditions.
- _____ 4. The basic learning objective was met.
- _____ 5. I perceive aesthetic growth in the children through the use of this activity.
- _____ 6. I would utilize this arts activity again.

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- _____ 1. The specific directions for the arts activity are adequate.
- _____ 2. The level of this arts activity is appropriate to the level of the class.
- _____ 3. It was necessary to adapt the arts activity to accommodate handicapping conditions.
- _____ 4. The basic learning objective was met.
- _____ 5. I perceive aesthetic growth in the children through the use of this activity.
- _____ 6. I would utilize this arts activity again.

Name of Activity: _____

- _____ 1. The specific directions for the arts activity are adequate.
- _____ 2. The level of this arts activity is appropriate to the level of the class.
- _____ 3. It was necessary to adapt the arts activity to accommodate handicapping conditions.
- _____ 4. The basic learning objective was met.
- _____ 5. I perceive aesthetic growth in the children through the use of this activity.
- _____ 6. I would utilize this arts activity again.

Name of Activity: _____

- _____ 1. The specific directions for the arts activity are adequate.
- _____ 2. The level of this arts activity is appropriate to the level of the class.
- _____ 3. It was necessary to adapt the arts activity to accommodate handicapping conditions.
- _____ 4. The basic learning objective was met.
- _____ 5. I perceive aesthetic growth in the children through the use of this activity.
- _____ 6. I would utilize this arts activity again.

ARTS IN EDUCATION PROJECT

Seminar Evaluation

June 26-28, 1979

Instructions: Please complete this evaluation form at the conclusion of the meeting on Thursday morning. Give it to NCAH staff members. You may sign evaluation form if you wish.

SESSION	OBJECTIVE	CIRCLE ONE Was objective met?				
SESSION ONE	To increase awareness of AIE activities of each participating site	Yes 5	4	3	2	No 1
SESSION TWO	To critically examine the Arts for learning Guide in terms of design, content, student and teacher population	Yes 5	4	3	2	No 1
SESSION THREE	To provide information about the data received by NCAH from project sites	Yes 5	4	3	2	No 1
SESSION FOUR	To identify and discuss issues concerning the integration of the Arts for Learning Guide into existing education programs	Yes 5	4	3	2	No 1

General Questions

Circle One:

Did you feel that there was ample time for AIE group meetings?

Yes 5 4 3 2 1 No

The meetings were helpful in considering future directions for AIE in my site

Yes No

My expectations for the AIE group meeting were:

High 5 4 3 2 1 Low

I consider the value of these sessions to be:

High 5 4 3 2 1 Low

The most valuable aspect of the AIE seminars was:

The least valuable aspect of the AIE seminars was:

THE NATIONAL COMMITTEE; ARTS FOR THE HANDICAPPED

ARTS FOR LEARNING WORKSHOP EVALUATION

Location of workshop _____

Date _____

Opinion About the Workshop

Directions: Each of the word pairs below is separated by a line divided into 7 spaces. For each pair decide quickly whether you think this workshop would be more like the word on the right or on the left. Then put an (x) in the space which best describes how you feel about this experience as a whole.

enjoyable	_____	_____	_____	_____	_____	_____	not enjoyable
useless	_____	_____	_____	_____	_____	_____	useful
ordinary	_____	_____	_____	_____	_____	_____	unusual
organized	_____	_____	_____	_____	_____	_____	disorganized
irrelevant	_____	_____	_____	_____	_____	_____	relevant
clear	_____	_____	_____	_____	_____	_____	vague
valuable	_____	_____	_____	_____	_____	_____	worthless
difficult	_____	_____	_____	_____	_____	_____	easy
like	_____	_____	_____	_____	_____	_____	dislike
meaningless	_____	_____	_____	_____	_____	_____	meaningful
successful	_____	_____	_____	_____	_____	_____	unsuccessful
relaxed	_____	_____	_____	_____	_____	_____	tense
boring	_____	_____	_____	_____	_____	_____	interesting

Directions: For the following five statements and questions indicate by number your assessment of the workshop as a whole.
1-Excellent 2-Good 3-Adequate 4-Inadequate

1. Organization and presentation of workshop _____
2. Interaction and communication among participants _____
3. Length: Structuring of time for maximum comfort & interest _____
4. How well did this workshop provide you with skills and new ideas about using the arts to enhance the learning of basic skills with handicapped children and youth? _____
5. How well did this workshop increase your comfort in using the arts in your classroom? _____

If this type of workshop were offered again, what changes would you suggest? _____

Other comments _____

OVERALL REACTION

How valuable was this experience?

highly valuable valuable of little value

--	--	--

Thank you for your responses!

AIE SITE VISIT

Lumberg Elementary School
Edgewater, CO

April 13, 1979
by Jamie Goldberg

Activities: Arrived at 9:00 AM. Visited classrooms of many of participating teachers and talking individually in teachers lounge with others. Master teacher Alan Hubbard was conducting a mime day with his students. They were in face paint and could not use oral language to communicate. Activities were in conjunction with unit on the senses. I followed class to music where activities with rhythm instruments was conducted without use of words. Saw Masks being made in regular class with handicapped children integrated. Met with teachers after school to ask and answer questions.

Impressions: Teachers were solidly in support of and enthusiastic about guide. The guide is an extension of their ongoing activity in arts infusion. My impressions are that these teachers have a high level of understanding and sophistication about what it means to integrate arts into the existing curriculum. The guide has help to give them substance, organization and new ideas to what they have been doing.

Prior to beginning of the project, Jim Allison's Arts in Education team did an all day workshop with participating teachers. Its goals were to: make certain that teachers understood concept of arts integration and could articulate it to parents; have teachers experience some of the lessons themselves and then discuss reactions, possible adaptations. According to all involved, these workshops were highly successful.

Principals Bob Wallace copies and enlarged each of the matrixes for each volume and put it on bulletin board in teachers lounge. Teachers are encouraged to write in the activities they used so that other teachers can check in for support when needed.

Arts Workshop Interest: Bob didn't feel that another "hands on" workshop would be appropriate at this time due to high level of other activities and previous hands on workshops. He will explore possibility of a year end wrap up (lunch, dinner or cocktails) where teachers could evaluate their experience and talk about next year. He'll see what Joe Lasky, Director of Special Ed for Jeffco can do to support this. We'll check with each other in a few weeks.

Future Dissemination of Guide: Bob asked questions about our dissemination strategies. He stressed the importance of reaching good people to work with teachers in inservice rather than getting guide to places.

SPEED Developmental Center

By: Jamie Goldberg

Activities: I met with Betty Krebs on the evening of March 29 and we made arrangements for next day. I visited a majority of classrooms of teachers participating at the main Speed Center. I also went to the new SPEED/Ludeman Center (where institutionalized kids attend) and visited all classrooms. Many of the participants are working with severe and profoundly handicapped children. I saw the following activities: Jello walk done with the real stuff, SPEED performing group for the NVSAF rehearsing. I met with all participating teachers for half hour after school.

The following comments were made:

How can you measure on a one-shot deal aesthetic growth. Maybe better to state stimulate aesthetic growth

Hokey-Pokey too uncreative, like cut and paste activities

Betty thinks music activities could be extended, do more with

Agreement that activities for severe and profound need adaptation but felt that guide is stimulating. I encouraged them to record all adaptations/ Explored idea of having section in the guide which suggests adaptations for severe and profound.

Impressions: Band wagon effect created in terms of teachers wanting to get involved in project. Kept wanting to participate as they saw others doing. Teachers are positive about amount of adapting they have to do. Appreciate having the organization.

Betty is concerned about the not needing the specialist business in the talks to teachers. She feels we need to be clearer about meaning that regular classroom teachers can integrate the arts but not replace the specialist.

Betty thinks that workshop will be good towards the end. She doesn't yet know if she will keep it to only AIE participants to extend to general staff. Betty has done a super job of increasing arts activities in the school. REAL good awareness and acceptance!!!!

General Findings

This workshop was highly successful in meeting its objectives. Ninety percent (90%) of the participants rated the workshop highly useful and relevant. The participants unanimously rated the organization and presentation of the workshop good (20%) to excellent (80%). Ninety percent (90%) responded that the utilization and structure of time was good and/or excellent.

The workshop succeeded in developing skills and new ideas among the participants (90%). Further, 100% of the participants indicated that they felt more comfortable in using arts in the classroom as a result of the workshop.

Overall, the workshop was considered to be excellent by 80% of the participants.

Recommendations

The workshop as developed and implemented was highly successful and considered beneficial by all who participated. The only recommendation this evaluator makes is to continue the excellence exhibited by this workshop.

Summary Evaluations

The summary evaluation is attached.

Summary Evaluation

ARTS FOR-LEARNING WORKSHOP
Celentano School
New Haven, Connecticut
May 22, 1979

Enjoyable	8	1	-	-	-	-	1	Not Enjoyable
Useless	-	-	-	-	1	-	9	Useful
Ordinary	-	-	-	1	3	4	2	Unusual
Organized	7	3	-	-	-	-	-	Disorganized
Irrelevant	-	-	-	-	1	0	9	Relevant
Clear	7	3	-	-	-	-	-	Vague
Valuable	9	1	-	-	-	-	-	Worthless
Difficult	-	-	-	4	2	3	1	Easy
Like	10	-	-	-	-	-	-	Dislike
Meaningless	-	-	-	-	-	-	10	Meaningful
Successful	9	1	-	-	-	-	-	Unsuccessful
Relaxed	7	0	3	-	-	-	-	Tense
Boring	-	-	-	-	-	1	9	Interesting

	Excellent	Good	Adequate	Inadequate
1. Organization and presentation	8	2	0	0
2. Interaction and communication	9	1	0	0
3. Length	3	6	1	0
4. Skills and new ideas	6	3	1	0
5. Comfort in use of arts	4	6	0	0

Changes and Comments (Numbers in parenthesis indicate number of respondents)

- More activities varying art media (3)
- Continuation and expansion of ideas presented (2)
- More participants (2)

Overall Rating

Highly valuable (8) Valuable (2) Of little value (0)



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EXECUTIVE DIRECTOR
WENDY PERKS

MEMO TO: Wendy Perks, Executive Director

FROM: Larry Riccio, Ed.D., Evaluation Consultant

RE: Evaluation Report for the Arts for Learning
Training Workshop Conducted by The National
Committee, Arts for the Handicapped,
SPEED Developmental Center, Chicago Heights,
Illinois, May 6, 1979

Goals and Objectives

The goal of the Arts for Learning Training Workshop is to provide inservice training for AIE participant teachers on a voluntary basis. This workshop sought to meet this goal by extending/adapting activities in the Arts For Learning Guide.

Participants

Twenty (20) AIE teachers participated in the workshop on a voluntary basis.

Workshop Agenda

The half day workshop introduced a variety of Arts in Education techniques utilizing an experiential approach.

Evaluation Procedure

Participants completed the Arts for Learning Workshop Evaluation Form prior to leaving the site.

314

General Findings

This workshop was exceptionally well received. The overall workshop rating by 90% of the participants was "very valuable". Ninety-five percent (95%) of the attendees felt they had acquired new skills and ideas, and would be more comfortable using arts in the classroom.

Recommendations

The participant responses for this workshop indicate that program goals and objectives were met very successfully.

Participant comments suggest that future workshops of this kind be held early in the school year with a follow-up workshop in the spring. Further, participants suggest that the workshop be longer and include more staff.

Summary Evaluations

The Summary evaluation is attached.

Summary Evaluation

ARTS FOR LEARNING WORKSHOP
Chicago Heights, Illinois
May 6, 1979

Enjoyable	20	-	-	-	-	-	-	Not Enjoyable
Useless	-	-	-	-	-	2	18	Useful
Ordinary	-	-	-	-	-	6	14	Unusual
Organized	19	-	-	-	-	-	1	Disorganized
Irrelevant	-	-	-	-	-	2	18	Relevant
Clear	20	-	-	-	-	-	-	Vague
Valuable	17	3	-	-	-	-	-	Worthless
Difficult	-	-	-	6	-	3	11	Easy
Like	20	-	-	-	-	-	-	Dislike
Meaningless	-	-	-	-	-	2	18	Meaningful
Successful	20	-	-	-	-	-	-	Unsuccessful
Relaxed	17	2	1	-	-	-	-	Tense
Boring	-	-	-	-	-	-	19	Interesting

	Excellent	Good	Adequate	Inadequate
1. Organization and presentation	20	0	0	0
2. Interaction and communication	20	0	0	0
3. Length	10	5	1	3
4. Skills and new ideas	16	3	1	0
5. Comfort in use of arts	16	3	1	0

Changes and Comments (Number in parenthesis indicates number of respondents)

- Workshop should be given at the start of school year (11)
with refresher course in spring
- Workshop should be longer (10)
- More staff should be involved (2)
- Participatory technique excellent (1)

Overall Rating

Highly valuable (18) Valuable (2) Of little value (0)



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EXECUTIVE DIRECTOR
WENDY PERKS

MEMO TO: Wendy Perks, Executive Director

FROM: Larry Riccio, Ed.D., Evaluation Consultant

RE: Evaluation Report for the Arts for Learning
Training Workshop Conducted by The National
Committee, Arts for the Handicapped,
Spokane, Washington, May 7, 1979

Goals and Objectives

The goal of the Arts for Learning Training Workshop is to provide inservice training for AIE participant teachers on a voluntary basis. This workshop sought to meet this goal by providing technical assistance in using curricular materials from The Arts For Learning Guide.

Participants

Twelve (12) AIE teachers participated in the workshop on a voluntary basis.

Workshop Agenda

The half day workshop introduced a variety of Arts in Education techniques utilizing an experiential approach.

Evaluation Procedure

Participants completed the Arts for Learning Workshop Evaluation Form prior to leaving the site.

General Findings

This workshop was very successful and a highly enjoyable experience. Ninety-two percent (92%) of the participants found the workshop relevant and useful. All considered it to be very well organized and presented.

The program imparted skills and new ideas and had assisted in increasing the participants' level of comfort in using the arts in their classrooms.

Recommendations

The workshop was so successful, that the only recommendation necessary is to echo the one most often made by participants; offer this workshop to more people.

Summary Evaluation

ARTS FOR LEARNING WORKSHOP
Spokane, Washington
May 7, 1979

Enjoyable	8	3	1	-	-	-	-	Not Enjoyable
Useless	-	1	-	-	-	4	7	Useful
Ordinary	-	-	-	-	4	2	6	Unusual
Organized	9	1	-	1	-	-	1	Disorganized
Irrelevant	-	-	-	-	1	5	6	Relevant
Clear	8	3	1	-	-	-	-	Vague
Valuable	8	3	1	-	-	-	-	Worthless
Difficult	-	-	-	2	1	3	6	Easy
Like	10	2	-	-	-	-	-	Dislike
Meaningless	-	-	-	-	1	3	8	Meaningful
Successful	8	2	1	1	-	-	-	Unsuccessful
Relaxed	7	5	-	-	-	-	-	Tense
Boring	-	-	-	-	-	3	9	Interesting

	Excellent	Good	Adequate	Inadequate
1. Organization and presentation	8	4	0	0
2. Interaction and communication	11	1	0	0
3. Length	6	4	2	0
4. Skills and new ideas	9	1	2	0
5. Comfort in use of arts	8	2	1	0

Changes and Comments (Number in parenthesis indicates number of respondents)

- Invite more people (3)

Overall Rating

Highly valuable (8) Valuable (3) Little value (0)



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EXECUTIVE DIRECTOR
WENDY PERKS

MEMO TO: Wendy Perks, Executive Director

FROM: Larry Riccio, Ed.D., Evaluation Consultant

RE: Evaluation Report for the Arts for Learning
Training Workshop Conducted by The National
Committee, Arts for the Handicapped,
Veda Knox School, Arlington, Texas,
May 9, 1979

DATE: August 1, 1979

Goals and Objectives

The goal of the Arts for Learning Training Workshop is to provide inservice training for AIE participant teachers on a voluntary basis. This workshop sought to meet this goal by assisting teachers with ways to adapt arts activities to meet the needs of severely handicapped students.

Participants

Twelve (12) AIE teachers participated in the workshop on a voluntary basis.

Workshop Agenda

The half day workshop introduced a variety of Arts in Education techniques utilizing an experiential approach.

Evaluation Procedure

Participants completed the Arts for Learning Workshop Evaluation Form prior to leaving the site.

320

General Findings

Reactions to this workshop were mixed. Eighty-three percent (83%) of the participants found the workshop to be relevant, clear, and interesting, and 75% found it to be enjoyable and meaningful.

The organization and presentation of the workshop was considered good to excellent by 75% of the respondents. Only 66% of the participants considered the workshop to be good to excellent for promoting interaction and communication. Overall, approximately one fourth of the participants felt the activity had contributed to new skills and ideas, and an increase in the level of comfort with the use of the arts in classrooms.

Overall, participants considered the workshop valuable.

Recommendations

Comments shed little light on the mixed reactions to this workshop. Participants most often addressed a need for greater participation and more time.

Summary Evaluations

The summary evaluation is attached.

Summary Evaluation

ARTS FOR LEARNING WORKSHOP
Veda Knpx School
Arlington, Texas
May 9, 1979

Enjoyable	7	2	1	2	-	-	-	Not Enjoyable
Useless	-	-	1	2	2	2	5	Useful
Ordinary	2	-	-	1	1	-	7	Unusual
Organized	6	1	1	1	3	-	-	Disorganized
Irrelevant	-	-	-	1	1	2	8	Relevant
Clear	10	-	-	2	-	-	-	Vague
Valuable	7	0	2	3	-	-	-	Worthless
Difficult	-	-	-	2	2	3	4	Easy
Like	6	3	-	3	-	-	-	Dislike
Meaningless	-	-	-	2	1	3	6	Meaningful
Successful	5	4	1	2	-	-	-	Unsuccessful
Relaxed	6	3	-	3	-	-	-	Tense
Boring	-	-	-	2	-	2	8	Interesting

	Excellent	Good	Adequate	Inadeq
1. Organization and presentation	6	3	3	0
2. Interaction and communication	2	6	3	0
3. Length	2	4	4	1
4. Skills and new ideas	5	4	3	0
5. Comfort in use of arts	4	5	3	0

Changes and Comments (Number in parenthesis indicates number of respondents)

- More participation (6)
- Longer session (4)

Overall Rating

Highly valuable (4) Valuable (8) Of little Value (0)

General Findings

This workshop was very well received. Ninety-five percent (95%) of the participants considered the workshop relevant and useful. Further, high ratings were unanimously given for organization, clarity, enjoyment, value and overall success.

All participants found the workshop to be good to excellent in its presentation, and for imparting skills and new ideas. Further, 95% felt that the workshop had contributed to an increased comfort in the use of the arts in the classroom.

Comments suggest that individual sessions were too short, that the workshop should have been presented earlier in the year, and the workshop should be repeated to increase exposure.

The workshop's overall value was considered very high by 80% of the participants, with 20% rating it satisfactory.

Recommendations

Considering the success of this workshop requests for repetition of this workshop (possibly earlier in the school year) should be considered.

Individual sessions could be extended to allow for maximum interaction, while also honoring requests for a greater variety of activities.

Attendees should also be forewarned to wear appropriate clothing in order to maximize participation.

Summary Evaluations

The summary evaluation is attached.

Summary Evaluation

ARTS FOR LEARNING WORKSHOP
Clover Park, Washington
May 10, 1979

Enjoyable	16	4	-	-	-	-	-	Not Enjoyable
Useless	-	-	-	-	1	6	13	Useful
Ordinary	-	-	-	2	2	4	12	Unusual
Organized	19	1	-	-	-	-	-	Disorganized
Irrelevant	-	-	-	1	-	6	13	Relevant
Clear	16	4	-	-	-	-	-	Vague
Valuable	14	6	-	-	-	-	-	Worthless
Difficult	-	-	2	5	4	1	8	Easy
Like	16	4	-	-	-	-	-	Dislike
Meaningless	-	-	-	-	-	5	15	Meaningful
Successful	16	4	-	-	-	-	-	Unsuccessful
Relaxed	11	6	-	1	1	1	-	Tense
Boring	-	-	-	-	-	4	16	Interesting

	Excellent	Good	Adequate	Inadequate
1. Organization and presentation	20	0	0	0
2. Interaction and communication	7	11	2	0
3. Length	9	4	2	5
4. Skills and new ideas	12	8	0	0
5. Comfort in use of arts	12	7	1	0

Changes and Comments (Numbers in parenthesis indicate number of respondents)

- Make session longer (8)
- Forewarn people so they can wear suitable clothing (3)
- Bring one or two students to share experience (1)
- More special information on how to introduce material to students who are not arts oriented, and how long lessons should be (1)
- Present earlier in the school year (3)
- Repeat workshop for more exposure (5)

Overall Rating

Highly valuable (16) Valuable (4) Of little value (0)



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WENDY PERKS

MEMO TO: Wendy Perks, Executive Director

FROM: Larry Riccio, Ed.D., Evaluation Consultant

RE: Evaluation Report for the Arts for Learning
Training Workshop, Conducted by The National
Committee, Arts for the Handicapped,
Chaut County BOCES, Ashville, New York,
May 11, 1979

DATE: August 1, 1979

Goals and Objectives

The goal of the Arts for Learning Training Workshop is to provide inservice training for AIE participant teachers on a voluntary basis. This workshop sought to meet this goal by providing technical assistance in using curricular materials from The Arts For Learning Guide.

Participants

Nine (9) AIE teachers participated in the workshop on a voluntary basis.

Workshop Agenda

The half day workshop introduced a variety of Arts in Education techniques utilizing an experiential approach.

Evaluation Procedure

Participants completed the Arts for Learning Workshop Evaluation Form prior to leaving the site.

General Findings

This workshop was highly successful, and relevant. Participants (89%) found the workshop enjoyable and meaningful.

Workshop ratings for organization and presentation were consistently high, with 100% responding in good to excellent in these areas.

Participants felt that they had acquired skills and new ideas (89%) and felt more comfortable in utilizing the arts in their classrooms (89%).

Overall workshop ratings showed that 100% of the participants considered the workshop valuable to very valuable.

Recommendations

Participants indicated that Friday afternoon was not an ideal time to hold this type of activity, and that more handout and written materials should be utilized to reinforce workshop concepts.

In summary, this workshop is worthy of duplicating with great success anticipated.

Summary Evaluations

The summary evaluation is attached.

Summary Evaluation

ARTS FOR LEARNING WORKSHOP
Chaut County BOCES
Ashville, New York
May 11, 1979

Enjoyable	6	2	1	-	-	-	-	Not Enjoyable
Useless	-	-	-	-	-	4	5	Useful
Ordinary	-	-	-	2	1	2	4	Unusual
Organized	5	2	2	-	-	-	-	Disorganized
Irrelevant	-	-	-	-	-	3	6	Relevant
Clear	3	4	2	-	-	-	-	Vague
Valuable	5	3	1	-	-	-	-	Worthless
Difficult	-	1	-	1	-	2	5	Easy
Like	7	1	1	-	-	-	-	Dislike
Meaningless	-	-	-	-	1	3	5	Meaningful
Successful	5	4	-	-	-	-	-	Unsuccessful
Relaxed	-	-	-	-	-	-	-	Tense
Boring	-	-	-	-	-	1	8	Interesting

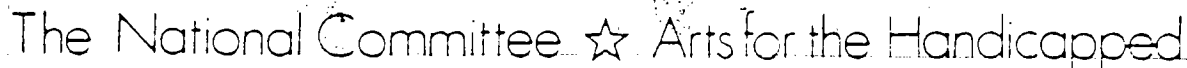
	Excellent	Good	Adequate	Inadequate
1. Organization and implentation	4	5	0	0
2. Interaction and communication	3	5	1	0
3. Length	1	4	3	1
4. Skills and new ideas	1	7	1	0
5. Comfort in use of arts	0	8	1	0

Changes and Comments (Number in parenthesis indicates number of respondents)

- Friday afternoon workshop difficult (4)
- Handout printed materials (2)

Overall Rating

Highly valuable (6) Valuable (3) Of little value (0)



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[illegible]

EXECUTIVE DIRECTOR
WENDY PUGH

MEMO TO: Wendy Perks, Executive Director

FROM: Larry Riccio, Ed.D., Evaluation Consultant

RE: Evaluation Report for the Arts for Learning
Training Workshop Conducted by The National
Committee, Arts for the Handicapped,
Litzsinger School, St. Louis, Missouri,
May 17, 1979

DATE: August 17, 1979

Goals and Objectives

The goal of the Arts for Learning Training Workshop is to provide inservice training for AIE participant teachers on a voluntary basis. This workshop sought to meet this goal by providing additional experiences with movement, to increase teacher familiarity and comfort in the use of movement activities.

Participants

Thirteen (13) AIE teachers participated in the workshop on a voluntary basis.

Workshop Agenda

The half day workshop introduced a variety of Arts in Education techniques utilizing an experiential approach.

Evaluation Procedure

Participants completed the Arts for Learning Workshop Evaluation Form prior to leaving the site.

General Findings

This workshop was received with mixed feelings. In general ratings regarding organization, and presentation were very positive. All participants found these areas to be good to excellent. Ratings for appropriateness and value of workshop content were scattered along a bell-like curve, with overall success of the endeavor somewhere in the good/adequate range. Comments indicate that the content of the workshop was not totally appropriate for the handicapping condition of the present student population (50%), and that not enough time was available for discussion.

Twenty-three percent (23%) of the participants, however, rated the workshop as highly valuable and 62% rated it valuable, suggesting that participants felt they had received some benefit from their attendance.

Recommendations

The structure, organization and presentation of this workshop maintained the consistently high standards of NCAH. It would appear that in this case, however, the content of the presentation could have been more harmonious with participant needs.

Pre-workshop communications should adequately state site needs, goals and objectives in order to avoid future program shortcomings, and to continue the standard of excellence set by NCAH.

Summary Evaluation

The summary evaluation is attached.

Summary Evaluation

ARTS FOR LEARNING WORKSHOP
St. Louis, Missouri
May 17, 1979

Enjoyable	5	5	2	1	-	-	-	Not Enjoyable
Useful	1	2	3	2	5	2	1	Useless
Ordinary	-	-	-	1	1	-	1	Unusual
Organized	9	3	-	-	1	-	-	Disorganized
Irrelevant	-	2	3	2	5	1	0	Relevant
Clear	3	4	5	1	-	-	-	Vague
Valuable	1	3	3	3	-	2	-	Worthless
Difficult	-	1	1	4	2	3	2	Easy
Like	5	3	2	1	1	1	-	Dislike
Meaningless	-	2	1	2	3	4	1	Meaningful
Successful	4	3	2	3	-	1	-	Unsuccessful
Relaxed	7	4	0	2	-	-	-	Tense
Boring	-	-	-	2	3	1	7	Interesting

	Excellent	Good	Adequate	Inadequate
1. Organization and presentation	6	7	0	0
2. Interaction and communication	3	4	3	3
3. Length	0	4	6	2
4. Skills and new ideas	0	4	6	3
5. Comfort in use of arts	0	3	8	2

Changes and Comments (Number in parenthesis reflects number of individuals responding)

- o Not appropriate to the handicapped children taught (7)
- o More chance for discussion and verbal explanation (3)
- o Shorter sessions or time for breaks (3)
- o Handouts or written material needed (2)
- o Forewarning so all could dress appropriately (2)
- o More variety in arts (1)

Overall Rating

Highly valuable (3) Valuable (8) Of little value (2)

General Findings

The workshop was enormously well received despite the resentment engendered by the leader's late arrival. Participants were unanimous that the workshop was enjoyable, valuable, meaningful and successful. Eight-nine percent (89%) found it to be clear, and 79% thought it was unusual, well organized and relevant. The material was generally thought to be neither easy, nor difficult but highly appropriate.

In specific, most participants (56%) found the organization and presentation excellent and 44% found it good. Interaction and communication was rated excellent to good by 78% of the participants, and adequate by 22%. Structure of time and increase in comfort in the use of arts in the classroom were rated similarly, with 100% of the participants finding both to be good to excellent. The workshop's success at presenting new skills and ideas was rated good to excellent by 89% of the participants. Eleven percent (11%) rated the workshop inadequate on this item.

Every participant but one commented on the leader's late arrival and felt that this had gotten the group off to a slow start. Many stated, however, that it was the leader's personal warmth and talent which brought the workshop off, and was the major reason it proved highly valuable to everyone.

Recommendations

Considering the success of the workshop it appears that offering this type of activity again with a larger audience is called for.

Summary Evaluations

The summary evaluation is attached.

Summary Evaluation

ARTS FOR LEARNING WORKSHOP
Sara's Center
Great Neck, New York
June 7, 1979

Enjoyable	9	-	-	-	-	-	-	Not Enjoyable
Useless	-	-	-	-	-	3	6	Useful
Ordinary	-	-	-	-	2	3	4	Unusual
Organized	4	3	1	-	1	-	-	Disorganized
Irrelevant	-	-	-	1	1	4	3	Relevant
Clear	4	4	1	-	-	-	-	Vague
Valuable	6	3	-	-	-	-	-	Worthless
Difficult	-	-	1	4	2	0	2	Easy
Like	9	-	-	-	-	-	-	Dislike
Meaningless	-	-	-	-	-	2	7	Meaningful
Successful	7	2	-	-	-	-	-	Unsuccessful
Relaxed	-	3	-	-	-	-	-	Tense
Boring	-	-	-	-	-	1	8	Interesting

	Excellent	Good	Adequate	Inadequate
1. Organization and presentation	5	4	0	0
2. Interaction and communication	5	2	2	0
3. Length	4	5	0	0
4. Skills and new ideas	6	2	0	0
5. Comfort in use of arts	4	5	0	0

Changes and Comments (number in parenthesis indicates number of respondents)

- Leader should come on time (8)
- Leader's personal warmth and talent great asset (4)

Overall Rating

Highly valuable (9) Valuable (0) Little Value (0)



The National Committee ☆ Arts for the Handicapped

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MEMO TO: Wendy Perks, Executive Director

FROM: Larry Riccio, Ed.D., Evaluation Consultant

RE: Evaluation Report for the Arts for Learning
Training Workshop Conducted by The National
Committee, Arts for the Handicapped,
Greenlake Elementary, Seattle, Washington,
June 20, 1979.

DATE: August 1, 1979

Goals and Objectives

The goal of the Arts for Learning Training Workshop is to provide inservice training for AIE participant teachers on a voluntary basis. This workshop sought to meet this goal by providing teachers with specific arts activities which teach the basic skills.

PARTICIPANTS

Seven (7) AIE teachers participated in the workshop on a voluntary basis.

Workshop Agenda

The half day workshop introduced a variety of Arts in Education techniques utilizing an experiential approach.

Evaluation Procedure

Participants completed the Arts for Learning Workshop Evaluation Form prior to leaving the site.

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General Findings

This workshop was very well received by the participants, who found the workshop to be highly enjoyable, useful, well organized and very relevant. No negative ratings were recorded by respondents.

An analysis of specific questions indicates that 86% of the participants rated the event as excellent for organization, structure, and presentation. Seventy-one percent (71%) found the workshop a positive influence on the acquisition of skills and new ideas, and on an increase in comfort in the use of the arts in the classroom.

The most frequent comment made called for additional time. Other comments suggested that more teachers be present, and that a greater variety of populations be presented.

Participants unanimously rated the workshop highly valuable.

Recommendations

The participant evaluation alone reflects the enormous success of this workshop. All that can be recommended is that additional workshops of this quality be presented to impact on greater numbers of teachers, and possibly be extended to a full day activity. This should further allow for extending the scope and content to a larger variety of handicapping conditions.

Summary Evaluations

The summary evaluation report is attached.

Summary Evaluation

ARTS FOR LEARNING WORKSHOP
Seattle, Washington
June 20, 1979

Enjoyable	6	1	-	-	-	-	-	Not Enjoyable
Useless	-	-	-	-	-	-	7	Useful
Ordinary	-	-	-	-	1	3	3	Unusual
Organized	6	1	-	-	-	-	-	Disorganized
Irrelevant	-	-	-	-	-	1	6	Relevant
Clear	6	1	-	-	-	-	-	Vague
Valuable	6	1	-	-	-	-	-	Worthless
Difficult	-	-	-	1	-	1	5	Easy
Like	6	1	-	-	-	-	-	Dislike
Meaningless	-	-	-	-	-	1	6	Meaningful
Successful	7	0	-	-	-	-	-	Unsuccessful
Relaxed	6	1	-	-	-	-	-	Tense
Boring	-	-	-	-	-	1	6	Interesting

	Excellent	Good	Adequate	Inadequate
1. Organization and implementation	6	1	0	0
2. Interaction and communication	3	2	2	0
3. Length	3	2	2	0
4. Skills and new ideas	5	2	0	0
5. Comfort in use of arts	5	2	0	0

Changes and Comments (Number in parenthesis reflects number of individuals responding)

- More time (4)
- Presentation with more than one population (1)
- More teachers allowed to participate (1)
- More concrete methods (1)
- Shorter demonstration with more time for teacher involvement (1)

Overall Reaction

Highly valuable (7) Valuable (0) Of little value (0)